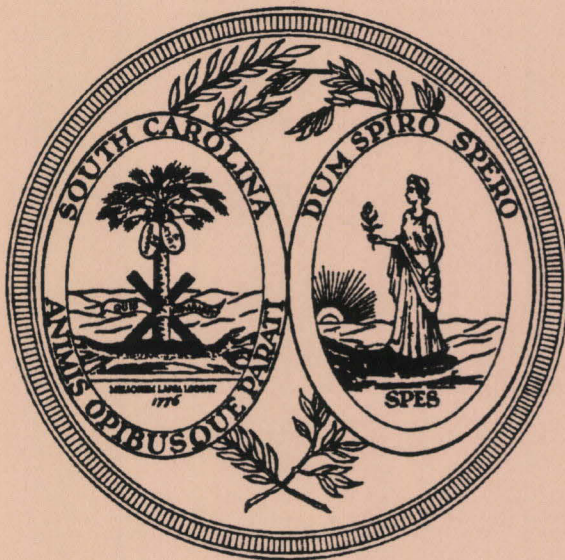


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# STATE HAZARD MITIGATION GRANT PROGRAM



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STATE DOCUMENTS

## APPLICANTS' GUIDE

PUBLISHED BY THE OFFICE OF THE GOVERNOR





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## **I. INTRODUCTION**

### **FOREWORD**

With the passage of Hurricane Hugo in September 1989, the State of South Carolina sustained over \$6 billion in damage and destruction over a 24 county area. The losses incurred during Hugo reached across a broad spectrum of human endeavors, affecting buildings, roadways, utilities, communications, industry, and various other concerns, as well as South Carolina's natural resources. In addition to hurricanes, the state is subject to the destructive influences of a number of other natural hazards including earthquakes, drought, tornadoes, flooding, wildfire, and seasonal storms.

Mitigation, the proactive reduction or elimination of losses due to natural hazards, has been practiced in various forms in South Carolina. In the aftermath of Hugo, a formal mitigation program was enacted in the state to capitalize on lessons learned. Additionally, the state has elected to formally participate in the Federal Emergency Management Agency's Section 404 Mitigation Grant Program for the Presidential Disaster Declarations covering Hurricane Hugo in September 1989 and the Flooding of October 1990. The pamphlet has been published to provide guidance to state and local applicants desiring to participate in the program.

### **HOW TO USE THIS PAMPHLET**

The 404 Mitigation Grant Program is a new program with very limited resources in terms of detailed policy and information provided at the national level. This pamphlet has been developed to address this void and guide applicants through the analysis, development, and submission procedures for funding of potential mitigation projects. In accomplishing this objective the pamphlet also provides an overview of the conduct of the Mitigation Grant Program in South Carolina.

While FEMA's program parameters are delineated in Section N of the governing Federal Register (enclosed), detailed implementation guidance is forthcoming and is expected sometime in mid 1991. The information contained in this pamphlet is based upon state experience with the program to date and guidance which has been provided by FEMA Region IV. It is intended for use by respective county mitigation representatives, local government emergency management officials, and qualified applicants to assist in the preparation of strong project applications.

The formulation of mitigation measures should result from a systematic screening and prioritization of mitigation opportunities during an ongoing planning process and immediately following a disaster. When making the decision to apply for a grant, it is important to remember that the proposed mitigation measure must meet all the criteria set forth in the Federal Register. If these criteria are met, the next step is to prepare the application following the instructions provided in this pamphlet. A model application has been provided for instructional use to assist in this process.



## **II. COMMONLY ASKED QUESTIONS**

### **WHAT IS THE HAZARD MITIGATION PROGRAM?**

The Hazard Mitigation Grant Program (HMGP) was created in November 1989, by section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The Purpose of the Program is to provide 50/50 match funds to States, and through them, to local communities, to enable immediate and long-term hazard mitigation measures to be implemented following a major disaster declaration in a State. The overall goal of the Program is to effectively reduce a State or community's vulnerability to natural hazards. The program is administered by the States, with the technical support provided by the FEMA region IV office.

### **WHAT ARE THE HMGP's OBJECTIVES?**

The program's objectives are:

- \* To prevent future losses of lives and property due to disaster;
- \* To implement State or local Hazard Mitigation plans;
- \* To enable mitigation measures to be implemented during immediate recovery from a disaster; and
- \* To provide funding for previously identified mitigation measures that benefit the disaster area.

### **WHO IS ELIGIBLE?**

Eligibility is the same for the Hazard Mitigation Grant Program as it is for the Public Assistance Program; although it does not duplicate mitigation eligible under the Public Assistance Program. Eligible applicants are:

- \* State and local governments;
- \* Certain private and non-profit organizations or institutions; and
- \* Indian tribes or authorized tribal organizations and Alaska Native villages or organizations

## **WHAT TYPE OF PROJECTS CAN BE FUNDED?**

The HMGP can be used to fund projects to protect either public or private property. Examples of projects include:

- \* Structural hazard control, such as debris basins or floodwalls;
- \* Retrofitting, such as floodproofing to protect structures from future damage;
- \* Acquisition and relocation of structures from hazard-prone areas;
- \* Warning systems and accompanying disaster preparedness and mitigation plans to protect communities from loss of life and property; and
- \* Development of State or local standards to protect new and substantially improved structures from disaster damage.

## **HOW MUCH MONEY IS AVAILABLE IN THE HMGP?**

Based upon a state allocation of available funding after a Presidential Disaster Declaration, FEMA can fund up to 50% of the cost of each project. The State or local match does not need to be in cash; it can be met with in-kind services or materials. Total Federal funding under the HMGP is limited to 10% of the Federal funds committed to the Public Assistance Program in repairing or replacing public facilities. Even though the amount of funding is tied to the Public Assistance Program, the HMGP is a completely separate program.

## **HOW DOES THE HMGP DIFFER FROM THE MITIGATION FUNDED UNDER THE PUBLIC ASSISTANCE PROGRAM?**

Mitigation projects may also be identified and funded through FEMA's Public Assistance Program after a disaster declaration. Public Assistance funds allow an existing damaged facility to incorporate mitigation measures during repairs, if the measures are cost-effective or are required by code. These potential measures can be identified by either FEMA, the State, or the local applicant.

Mitigation funded under the Public Assistance Program is designated only for public facilities damaged by the disaster. The HMGP can fund mitigation measures to protect public or private property, so long as the measures fit within the overall mitigation strategy for the disaster area, and comply with program guidelines.



## **HOW DOES THE HMGP DIFFER FROM THE STATE MITIGATION PROGRAM?**

The Hazard Mitigation Grant Program has been designed to complement the broader efforts of the state program. The state program, through planning at the state and local levels, provide the foundation for the formulation of potential grant projects. It should be noted that many state and local mitigation measures, while of significant importance, do not necessarily satisfy the criteria of the grant program for funding.

## **WHEN DO YOU APPLY FOR THE HMGP?**

Following a disaster, the state establishes the network for administration of the grant program. Solicitation periods for the program are then advertised through county mitigation representatives. However, potential mitigation projects may be forwarded for review by the State Hazard Mitigation Officer at any time.

## **IS THERE ANY "PERFECT" MITIGATION PROJECT FOR THE HMGP?**

While there is no "perfect" HMGP project, there are traditionally accepted projects which have a greater potential for successful funding than other measures. These projects normally include "Brick and Mortar" efforts where the results provide cost effective, tangible and measurable mitigation benefits. Conversely, studies and plans without implementation components and programmatic enhancement of different systems, generally do not satisfy the criteria set forth in the Federal Register and may not qualify for funding.

## **HOW LONG DOES THE GRANT APPLICATION PROCESS TAKE?**

Upon submission of a grant to the state, a general turn around time of six to eight weeks from FEMA can be expected for a request that does not require additional staffing at the state level.

## **WHAT IS THE FORMULA FOR A SUCCESSFUL APPLICATION?**

Be prepared to commit a significant amount of time and staff work in the preparation of the application. While not wanting to discourage the generation of innovative, meaningful mitigation projects, it is important to remember the following considerations:

- \* The project must satisfy all criteria set forth in the Federal Register.
- \* If there is any question as to whether or not the project is a worthwhile HMGP candidate, a project outline should be developed using the enclosed Attachment 2 and forwarded to the state for a determination of eligibility.
- \* All elements of the project grant application must be completed in accordance with the criteria set forth in the enclosed application guide.

- \* Applicants should seek the guidance of the State Hazard Mitigation Officer on any questions that may arise as the grant application is developed.

#### **WHAT ARE THE MOST COMMON STUMBLING BLOCKS IN A HMGP APPLICATION?**

Experience to date has demonstrated that special attention should be directed to the following areas:

- \* Clear and succinct outline of the repetitive problem description. Generally, the problem is a particular natural hazard (flooding, high winds from a hurricane or tornado, drought, etc.) which must be described in terms of frequency, intensity, and losses incurred. Difficulties in completely describing the problem may occur due to the lack of available historical records, and the inability to capture costs associated with past losses.
- \* Inability to determine the costs associated with continuing losses. This is particularly important in providing a baseline for the computation of cost effectiveness for the application. Difficulties here occur in correlating past losses with projected losses in future occurrences of the hazard.
- \* Correlating cost associated with past and future repetitive losses to the total cost of the mitigation project. Total project cost includes cost of the project and an estimate of future costs (maintenance/modification). Difficulties occur if one of these four elements is not complete, because an accurate evaluation of cost effectiveness cannot be achieved.
- \* Linking the impact of the project's outcome to the solving of the repetitive problem. The applicant must be able to demonstrate that the project will either contribute to the comprehensive solution of, or, in itself, solve a repetitive problem.



**III. FEDERAL RULES GOVERNING THE  
404 MITIGATION GRANT PROGRAM**

**federal register**

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Thursday  
August 30, 1990

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**Part III**

**Federal Emergency  
Management Agency**

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44 CFR Part 206

Disaster Assistance; Hazard Mitigation  
Planning and Hazard Mitigation Grant  
Program; Final Rules

**PART 206—FEDERAL DISASTER ASSISTANCE FOR DISASTERS DECLARED ON OR AFTER NOVEMBER 23, 1988**

1. The authority citation for part 206 continues to read as follows:

Authority: The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. 93-288, as amended by Pub. L. 100-707; 42 U.S.C. 5121, *et seq.*; Reorganization Plan No. 3 of 1978 (3 CFR, 1979, p. 329); E.O. 12148 (3 CFR, 1980, p. 412) as amended by E.O. 12673 (3 CFR, 1990, p. 214).

2. Part 206 is amended by revising subpart N to read as follows:

**Subpart N—Hazard Mitigation Grant Program**

- 206.430 General.
- 206.431 Definitions.
- 206.432 Federal grant assistance.
- 206.433 State responsibilities.
- 206.434 Eligibility.
- 206.435 Project identification and selection criteria.
- 206.436 Application procedures.
- 206.437 State administrative plan.
- 206.438 Project management.
- 206.439 Allowable costs.
- 206.440 Appeals.

**Subpart N—Hazard Mitigation Grant Program**

**§ 206.430 General.**

This subpart provides guidance on the administration of hazard mitigation grants made under the provisions of section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Pub. L. 93-288, as amended) hereafter referred to as the Stafford Act, or the Act.

**§ 206.431 Definitions.**

(a) *Applicant* means a State agency, local government, or eligible private nonprofit organization, as defined in

subpart H of this part, submitting an application to the Governor's Authorized Representative for assistance under the Hazard Mitigation Grant Program.

(b) *Application* means the initial request for section 404 funding, as outlined in § 206.436.

(c) *Grant* means an award of financial assistance. The total grant award shall not exceed ten percent of the estimated Federal assistance provided under section 406 of the Stafford Act.

(d) *Grantee* means the government to which a grant is awarded and which is accountable for the use of the funds provided. The grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document. For purposes of this part, except as noted in § 206.436(g)(1), the State is the grantee.

(e) *Measure* means any mitigation measure, project, or action proposed to reduce risk of future damage, hardship, loss or suffering from disasters. The term "measure" is used interchangeably with the term "project" in this part.

(f) *Project* means any mitigation measure, project, or action proposed to reduce risk of future damage, hardship, loss or suffering from disasters. The term "project" is used interchangeably with the term "measure" in this part.

(g) *Section 409 Hazard Mitigation Plan* is the hazard mitigation plan required under section 409 of the Act as a condition of receiving Federal disaster assistance under Public Law 93-288, as amended. This hazard mitigation plan is the basis for the identification of measures to be funded under the Hazard Mitigation Grant Program.

(h) *State Administrative Plan for the Hazard Mitigation Grant Program* means the plan developed by the State to describe the procedures for administration of the Hazard Mitigation Grant Program.

(i) *Subgrant* means an award of financial assistance under a grant by a grantee to an eligible subgrantee.

(j) *Subgrantee* means the government or other legal entity to which a subgrant is awarded and which is accountable to the grantee for the use of the funds provided. Subgrantees can be a State agency, local government, private nonprofit organization, or Indian tribe as outlined in § 206.434.

(k) *Supplement* means an amendment to the hazard mitigation application to add or modify one or more mitigation measures.

**§ 206.432 Federal grant assistance.**

(a) *General.* This section describes the extent of Federal funding available



under the State's grant, as well as limitations and special procedures applicable to each.

(b) *Limitations on federal expenditures.* The total of Federal assistance under section 404 shall not exceed 10 percent of the estimated Federal assistance provided under section 409. The estimate of Federal assistance under section 406 shall be based on the Regional Director's estimate of all Damage Survey Reports, associated expenses, and any other assistance authorized under section 406.

(c) *Cost sharing.* All mitigation measures approved under the State's grant will be subject to the cost sharing provisions established in the FEMA-State Agreement. FEMA may contribute up to 50 percent of the cost of measures approved for funding under the Hazard Mitigation Grant Program. The nonfederal share may exceed the Federal share. FEMA will not contribute to costs above the Federally approved estimate.

#### § 206.433 State responsibilities.

(a) *Grantee.* The State will be the Grantee to which funds are awarded and will be accountable for the use of those funds. There may be subgrantees within the State government.

(b) *Priorities.* The State will determine priorities for funding. This determination must be made in conformance with § 206.435.

(c) *Hazard Mitigation Officer.* The State must appoint a Hazard Mitigation Officer, as required under 44 CFR part 206 subpart M, who serves as the responsible individual for all matters related to the Hazard Mitigation Grant Program.

(d) *Administrative plan.* The State must have an approved administrative plan for the Hazard Mitigation Grant Program in conformance with § 206.437.

#### § 206.434 Eligibility

(a) *Applicants.* The following are eligible to apply for the Hazard Mitigation Program Grant:

- (1) State and local governments;
- (2) Private non-profit organizations or institutions that own or operate a private non-profit facility as defined in § 206.221(e);
- (3) Indian tribes or authorized tribal organizations and Alaska Native villages or organizations, but not Alaska native corporations with ownership vested in private individuals.

(b) *Minimum project criteria.* To be eligible for the Hazard Mitigation Grant Program, a project must:

- (1) Be in conformance with the hazard mitigation plan developed as a requirement of section 409;

(2) Have a beneficial impact upon the designated disaster area, whether or not located in the designated area;

(3) Be in conformance with 44 CFR part 9, Floodplain Management and Protection of Wetlands, and 44 CFR part 10, Environmental Considerations;

(4) Solve a problem independently or constitute a functional portion of a solution where there is assurance that the project as a whole will be completed. Projects that merely identify or analyze hazards or problems are not eligible;

(5) Be cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster. The grantee must demonstrate this by documenting that the project:

(i) Addresses a problem that has been repetitive, or a problem that poses a significant risk to public health and safety if left unsolved,

(ii) Will not cost more than the anticipated value of the reduction in both direct damages and subsequent negative impacts to the area if future disasters were to occur. Both costs and benefits will be computed on a net present value basis,

(iii) Has been determined to be the most practical, effective, and environmentally sound alternative after consideration of a range of options,

(iv) Contributes, to the extent practicable, to a long-term solution to the problem it is intended to address;

(v) Considers long-term changes to the areas and entities it protects, and has manageable future maintenance and modification requirements.

(c) *Types of projects.* Projects may be of any nature that will result in protection to public or private property. Eligible projects include, but are not limited to:

- (1) Structural hazard control or protection projects;
- (2) Construction activities that will result in protection from hazards;
- (3) Retrofitting of facilities;
- (4) Acquisition or relocation;
- (5) Development of State or local mitigation standards;
- (6) Development of comprehensive hazard mitigation programs with implementation as an essential component;
- (7) Development or improvement of warning systems.

(d) *Duplication of programs.* Section 404 funds cannot be used as a substitute or replacement to fund projects or programs that are available under other Federal authorities, except under limited circumstances in which there are extraordinary threats to lives, public health or safety or improved property.

(e) *Packaging of programs.* Section 404 funds may be packaged or used in combination with other Federal, State, local, or private funding sources when appropriate to develop a comprehensive mitigation solution, though section 404 funds cannot be used as a match for other Federal funds.

#### § 206.435 Project identification and selection criteria.

(a) *Identification.* It is the State's responsibility to identify and select hazard mitigation projects. All funded projects must be consistent with the State's section 409 hazard mitigation plan. Hazard mitigation projects may be identified through the section 409 planning process, or through any other appropriate means. Procedures for the identification, funding, and management of mitigation projects shall be included in the State's administrative plan.

(b) *Selection.* The State will establish procedures and priorities for the selection of mitigation measures. At a minimum the criteria must be consistent with the criteria stated in § 206.434(b), and include:

(1) Measures that best fit within an overall plan for development and/or hazard mitigation in the community, disaster area, or State;

(2) Measures that, if not taken, will have a severe detrimental impact on the applicant, such as potential loss of life, loss of essential services, damage to critical facilities, or economic hardship on the community;

(3) Measures that have the greatest potential impact on reducing future disaster losses;

(c) *Other considerations.* In addition to the selection criteria noted above, consideration should be given to measures that are designed to accomplish multiple objectives including damage reduction, environmental enhancement, and economic recovery, when appropriate.

#### § 206.436 Application procedures.

(a) *General.* This section describes the procedures to be used by the State in submitting an application for funding for hazard mitigation grants. Under the Hazard Mitigation Grant Program the State is the grantee and is responsible for processing subgrants to applicants in accordance with 44 CFR parts 13 and 206.

(b) *Governor's Authorized Representative.* The Governor's Authorized Representative serves as the grant administrator for all funds provided under the Hazard Mitigation Grant Program. The Governor's Authorized Representative's



responsibilities as they pertain to procedures outlined in this section include providing technical advice and assistance to eligible subgrantees, and ensuring that all potential applicants are aware of assistance available and submission of those documents necessary for grant award.

(c) *Letter of intent to participate.* Within 60 days of the disaster declaration, the State (Governor's Authorized Representative) will notify FEMA in writing of its intent to participate or not participate in the Hazard Mitigation Grant Program. States are also encouraged to submit a hazard mitigation application within this timeframe so that immediate post-disaster opportunities for hazard mitigation are not lost.

(d) *Hazard mitigation application.* Upon identification of mitigation measures, the State (Governor's Authorized Representative) will submit its section 404 Hazard Mitigation Application to the FEMA Regional Director. The Application will identify one or more mitigation measures for which funding is requested. The Application must include a Standard Form (SF) 424, Application for Federal Assistance, SF 424D, Assurances for Construction Programs if appropriate, and a narrative statement. The narrative statement will contain any pertinent project management information not included in the State's administrative plan for Hazard Mitigation. The narrative statement will also serve to identify the specific mitigation measures for which funding is requested. Information required for each mitigation measure shall include the following:

- (1) Name of the subgrantee, if any;
- (2) State or local contact for the measure;
- (3) Location of the project;
- (4) Description of the measure;
- (5) Cost estimate for the measure;
- (6) Analysis of the measure's cost-effectiveness and substantial risk reduction, consistent with § 206.434(b);
- (7) Work schedule;
- (8) Justification for selection;
- (9) Alternatives considered;
- (10) Environmental information consistent with 44 CFR part 9, Floodplain Management and Protection of Wetlands, and 44 CFR part 10, Environmental Considerations;

(e) *Supplements.* The application may be amended as the State and subgrantees develop the section 409 hazard mitigation plan and continue to identify measures to be funded. Amendments to add or modify measures are made by submitting supplements to the application. All supplements to the application for the purpose of

identifying new mitigation measures must be submitted to FEMA within 90 days of FEMA approval of the section 409 plan. The Regional Director may grant up to a 90 day extension to this deadline upon receipt of written justification from the State that the extension is warranted. The supplements shall contain all necessary information on the measure as described in paragraph (d) of this section.

(f) *FEMA approval.* The application and supplement(s) will be submitted to the FEMA Regional Director for approval. FEMA has final approval authority for funding of all projects.

(g) *Exceptions.* The following are exceptions to the above outlined procedures and time limitations.

(1) *Grant applications.* An Indian tribe or authorized tribal organization may submit a SF 424 directly to the Regional Director when assistance is authorized under the Act and a State is unable to assume the responsibilities prescribed in these regulations.

(2) *Time limitations.* The time limitation shown in paragraph (c) of this section may be extended by the Regional Director when justified and requested in writing by the Governor's Authorized Representative.

(Approved by the Office of Management and Budget under OMB Control Number 3067-0207.)

#### § 206.437 State administrative plan.

(a) *General.* The State shall develop a plan for the administration of the Hazard Mitigation Grant Program.

(b) *Minimum criteria.* At a minimum, the State administrative plan must include the items listed below:

- (1) Designation of the State agency will have responsibility for program administration;
- (2) Identification of the State Hazard Mitigation Officer responsible for all matters related to the Hazard Mitigation Grant Program.
- (3) Determination of staffing requirements and sources of staff necessary for administration of the program;
- (4) Establishment of procedures to:
  - (i) Identify and notify potential applicants (subgrantees) of the availability of the program;
  - (ii) Ensure that potential applicants are provided information on the application process, program eligibility and key deadlines;
  - (iii) Determine applicant eligibility;
  - (iv) Conduct environmental and floodplain management reviews;
  - (v) Establish priorities for selection of mitigation projects;
  - (vi) Process requests for advances of funds and reimbursement;

(vii) Monitor and evaluate the progress and completion of the selected projects;

(viii) Review and approve cost overruns;

(ix) Process appeals;

(x) Provide technical assistance as required to subgrantee(s);

(xi) Comply with the administrative requirements of 44 CFR parts 13 and 206;

(xii) Comply with audit requirements of 44 CFR part 14;

(xiii) Provide quarterly progress reports to the Regional Director on approved projects.

(b) *Format.* The administrative plan is intended to be a brief but substantive plan documenting the State's process for the administration of the Hazard Mitigation Grant Program and management of the section 404 funds. This administrative plan should become a part of the State's overall emergency response or operations plan as a separate annex or chapter.

(c) *Approval.* The State must submit the administrative plan to the Regional Director for approval. Following each major disaster declaration, the State shall prepare any updates, amendments or plan revisions required to meet current policy guidance or changes in the administration of the Hazard Mitigation Grant Program. Funds shall not be awarded until the State administrative plan is approved by the FEMA Regional Director.

(Approved by the Office of Management and Budget under OMB control number 3067-0208.)

#### § 206.438 Project management.

(a) *General.* The State serving as grantee has primary responsibility for project management and accountability of funds as indicated in 44 CFR part 13. The State is responsible for ensuring that subgrantees meet all program and administrative requirements.

(b) *Cost overruns.* During the execution of work on an approved mitigation measure the Governor's Authorized Representative may find that actual project costs are exceeding the approved estimates. Cost overruns which can be met without additional Federal funds, or which can be met by offsetting cost underruns on other projects, need not be submitted to the Regional Director for approval, so long as the full scope of work on all affected projects can still be met. For cost overruns which exceed Federal obligated funds and which require additional Federal funds, the Governor's Authorized Representative shall evaluate each cost overrun and shall submit a request with a



recommendation to the Regional Director for a determination. The applicant's justification for additional costs and other pertinent material shall accompany the request. The Regional Director shall notify the Governor's Authorized Representative in writing of the determination and process a supplement, if necessary. All requests that are not justified shall be denied by the Governor's Authorized Representative. In no case will the total amount obligated to the State exceed the funding limits set forth in § 206.432(b). Any such problems or circumstances affecting project costs shall be identified through the quarterly progress reports required in paragraph (c) of this section.

(c) *Progress reports.* The grantee shall submit a quarterly progress report to FEMA indicating the status and completion date for each measure funded. Any problems or circumstances affecting completion dates, scope of work, or project costs which are expected to result in noncompliance with the approved grant conditions shall be described in the report.

(d) *Payment of claims.* The Governor's Authorized Representative shall make a claim to the Regional Director for reimbursement of allowable costs for each approved measure. In submitting such claims the Governor's Authorized Representative shall certify that reported costs were incurred in the performance of eligible work, that the approved work was completed and that the mitigation measure is in compliance with the provisions of the FEMA-State Agreement. The Regional Director shall determine the eligible amount of reimbursement for each claim and approve payment. If a mitigation measure is not completed, and there is not adequate justification for noncompletion, no Federal funding will be provided for that measure.

(e) *Audit requirements.* Uniform audit requirements as set forth in 44 CFR part 14 apply to all grant assistance provided under this subpart. FEMA may elect to conduct a Federal audit on the disaster assistance grant or on any of the subgrants.

#### § 206.439 Allowable costs.

(a) *General.* General policies for determining allowable costs are established in 44 CFR 13.22. Exceptions to those policies as allowed in 44 CFR 13.4 and 13.6 are explained below.

(b) *Eligible direct costs.* The eligible direct costs for administration and management of the program are divided into the following two categories.

(1) *Statutory administrative costs—(i) Grantee.* Pursuant to 406(f)(2) of the

Stafford Act, an allowance will be provided to the State to cover the extraordinary costs incurred by the State for preparation of applications, quarterly reports, final audits, and related field inspections by State employees, including overtime pay and per diem and travel expenses, but not including regular time for such employees. The allowance will be based on the following percentages of the total amount of assistance provided (Federal share) for all subgrantees in the State under section 404 of the Stafford Act:

(A) For the first \$100,000 of total assistance provided (Federal share), three percent of such assistance.

(B) For the next \$900,000, two percent of such assistance.

(C) For the next \$4,000,000, one percent of such assistance.

(D) For assistance over \$5,000,000, one-half percent of such assistance.

(ii) *Subgrantee.* Pursuant to section 406(f)(1) of the Stafford Act, necessary costs of requesting, obtaining, and administering Federal disaster assistance subgrants will be covered by an allowance which is based on the following percentages of total net eligible costs under section 404 of the Stafford Act, for an individual applicant (applicants in this context include State agencies):

(A) For the first \$100,000 of net eligible costs, three percent of such costs.

(B) For the next \$900,000, two percent of such costs.

(C) For the next \$4,000,000, one percent of such costs.

(D) For those costs over \$5,000,000, one-half percent of such costs.

(2) *State management costs—(i) Grantee.* Except for the items listed in paragraph (b)(1)(i) of this section, other administration costs shall be paid in accordance with 44 CFR 13.22. Costs of State personnel (regular time salaries only) assigned to administer the Hazard Mitigation Grant Program may be eligible when approved by the Regional Director. Such costs shall be shared in accordance with the cost share provisions of section 404 of the Act. For grantee administrative costs in the Disaster Field Office, the State shall submit a plan for the staffing of the Disaster Field Office within 5 days of the opening of the office. This staffing plan shall be in accordance with the administrative plan requirements of § 206.437. After the close of the Disaster Field Office, costs of State personnel (regular time salaries only) for continuing management of the hazard mitigation grants may be eligible when approved in advance by the Regional Director. The State shall submit a plan

for such staffing in advance of the requirement.

(c) *Eligible indirect costs—(1) Grantee.* Indirect costs of administering the disaster program are eligible in accordance with the provisions of 44 CFR part 13 and OMB Circular A-87.

(2) *Subgrantee.* No indirect costs of a subgrantee are separately eligible because the percentage allowance in paragraph (b)(1)(ii) of this section necessary costs of requesting, obtaining and administering Federal assistance.

#### § 206.440 Appeals.

(a) *Subgrantee.* The subgrantee may appeal any determination previously made related to Federal assistance for a subgrantee. The subgrantee's appeal shall be made in writing and submitted to the grantee within 60 days after receipt of a notice of the action which is being appealed. The appeal shall contain documented justification supporting the subgrantee's position.

(b) *Grantee.* Upon receipt of an appeal from a subgrantee, the grantee shall review the material submitted, make such additional investigations as necessary, and shall forward the appeal with a written recommendation to the Regional Director within 60 days.

(c) *Regional Director.* Upon receipt of an appeal, the Regional Director shall review the material submitted and make such additional investigations as deemed appropriate. Within 90 days following receipt of an appeal, the Regional Director shall notify the grantee, in writing, as to the disposition of the appeal or of the need for additional information. Within 90 days following the receipt of such additional information, the Regional Director shall notify the grantee, in writing, of the disposition of the appeal. If the decision is to grant the appeal, the Regional Director will take appropriate implementing action.

(d) *Associate Director.* (1) If the Regional Director denies the appeal, the subgrantee may submit a second appeal to the Associate Director. Such appeals shall be made in writing, through the grantee and the Regional Director, and shall be submitted not later than 60 days after receipt of notice of the Regional Director's denial of the first appeal. The Associate Director shall render a determination on the subgrantee's appeal within 90 days following receipt of the appeal or shall make a request for additional information. Within 90 days following the receipt of such additional information, the Associate Director shall notify the grantee, in writing, of the disposition of the appeal. If the decision is to grant the appeal, the Regional



Director will be instructed to take appropriate implementing action.

(2) In appeals involving highly technical issues, the Associate Director, at his/her discretion, may ask an independent scientific or technical group or person with expertise in the subject matter of the appeal to review the appeal in order to obtain the best possible evaluation. In such cases, the 90 day time limit will run from the submission of the technical report.

(c) *Director.* (1) If the Associate Director denies the appeal, the subgrantee may submit an appeal to the Director of FEMA. Such appeals shall be made in writing, through the grantee and the Regional Director, and shall be submitted not later than 60 days after receipt of notice of the Associate Director's denial of the second appeal.

(2) The Director shall render a determination on the subgrantee's appeal within 90 days following receipt of the appeal or shall make a request for additional information if such is necessary. Within 90 days following the receipt of such additional information, the Director shall render a determination and notify the grantee, in writing, of the disposition of the appeal. If the decision is to grant the appeal, the Regional Director will be instructed to take appropriate implementing action.

(3) In appeals involving highly technical issues, the Director may, at his/her discretion, submit the appeal to an independent scientific or technical person or group having expertise in the subject matter of the appeal for advice and recommendation. Before making the selection of this person or group, the

Director may consult with the grantee and/or the subgrantee.

(4) The Director may also submit appeals which he/she receives to persons who are not associated with FEMA's Disaster Assistance Programs office for recommendations on the resolution of appeals.

(5) Within 60 days after the submission of a recommendation made pursuant to paragraph (d) (3) and (4) of this section, the Director shall render a determination and notify the grantee of the disposition of the appeal.

Dated: August 17, 1990.

Grant C. Peterson,

*Associate Director, State and Local Programs and Support.*

[FR Doc. 90-20225 Filed 8-29-90; 8:45 am]

BILLING CODE 6718-02-M



#### IV. WHAT IS HAZARD MITIGATION?

The term "Hazard Mitigation" is defined as any activity or measure that permanently eliminates or reduces the long-term risk to life and property from natural or technological hazards. Traditionally, when emergency management programs are first established, mitigation seldom plays a prominent role. Later, if the public and private costs of responding to repeated hazard occurrences - including the loss of life and property - become unacceptably high, attention must turn to mitigation. Hazard Mitigation actions can be accomplished by:

1. Acting on the hazard - Seeding hurricanes or triggering avalanches can eliminate a hazard before a disaster occurs.
2. Redirecting the hazard - A seawall or dune restoration program helps keep water away from people by redirecting the impacts away from a vulnerable location.
3. Interacting with the hazard - Public awareness programs or seismic safety provisions incorporated into building codes result in structures which are more able to withstand impacts of earthquakes.
4. Avoiding the hazard - River corridor projects create multiple beneficial uses of the flood plain while relocating structures to less vulnerable locations.

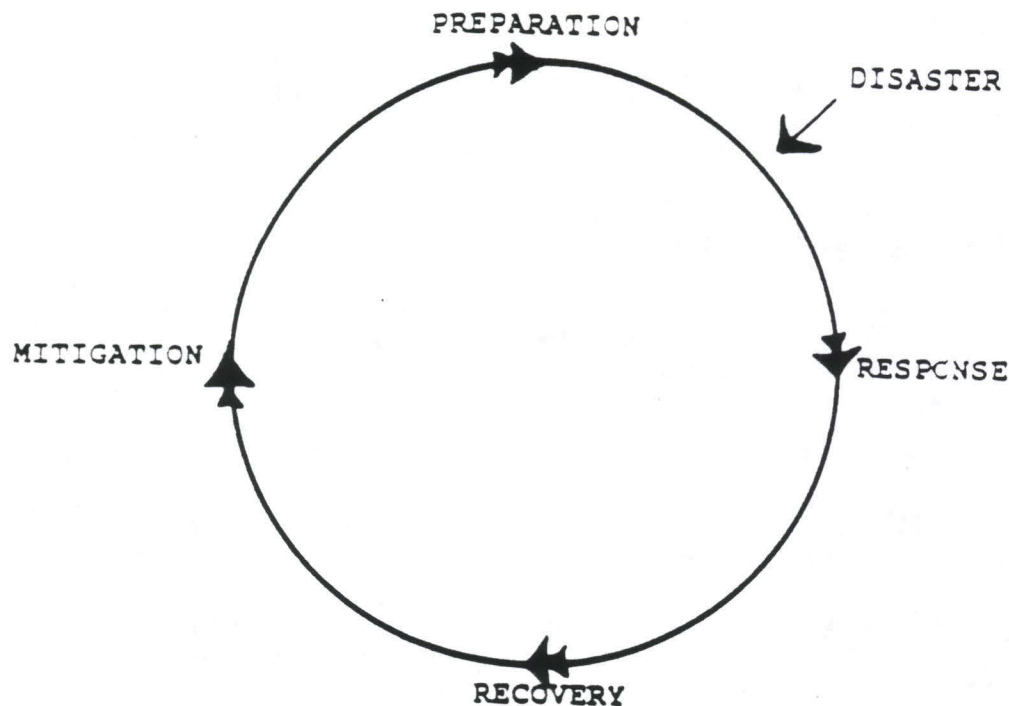
Hazard mitigation must be viewed in the context of its relationship as an element of the emergency management process. The other three elements in this process are preparedness, response, and recovery.

Preparedness activities are those emergency management actions which are taken prior to a disaster. Preparedness activities include response procedures, design and installation of warning systems, exercises to test emergency operations, and training of emergency personnel.

Response activities occur during the disaster and include rescue operations, evacuation, emergency medical care, and shelter programs.

Recovery activities are those emergency management actions which continue after the disaster. These actions include repairs to roads, bridges, and other public facilities, and activities that help restore normal services to a community.

Mitigation activities can take place before, during and after a disaster and help to reduce or eliminate the damages from future disaster events. Hazard mitigation is part of the disaster cycle and should be used to help break this cycle.



Some confusion exists between preparedness and mitigation. Preparedness generally refers to activities aimed at responding to future disasters, whereas mitigation refers to activities which reduce or eliminate the effects of future disasters. Mitigation consists of efforts undertaken in an orderly and planned fashion to accomplish the long-term prevention, avoidance or reduction of hazards in society.

### WHY MITIGATE IN SOUTH CAROLINA?

In 1989, the United States experienced two unrelated natural disasters of epic proportions which graphically illustrated the role of mitigation planning in disaster management. On October 19th, San Francisco, California and surrounding areas were rocked by an earthquake that measured 7.0 on the Richter scale. A history of earthquake activity within the region had energized a high degree of public awareness and effective mitigation measures, minimizing potentially catastrophic loss of life and structural damage. Conversely, a month earlier, Hurricane Hugo made landfall at Charleston, South Carolina on 22 September coinciding with the high tide waters, subjecting the state to a numbing combination of storm surges and high winds. A false sense of security resulting from over 30 years of relative quiet and a large boom in population along the coastline had not fostered an active awareness of mitigation opportunities. While the state's high level of preparedness insured a timely evacuation inland and minimized loss of life, property and structural damages which totaled in the billions of dollars. This is a rather simplistic analogy; however, a mature mitigation program in place within South Carolina may have impacted directly on the scope of losses sustained in Hugo and perhaps reduced them.

In order for hazard mitigation to be successful, there must be a recognition that it is possible to break the cycle of recurring destruction and a commitment to implementing protective measures. When developments are damaged by a primary hazard event such as a flood or earthquake, they should not be rebuilt in the same manner without taking adequate protective steps. Many developments have been rebuilt with little or no hazard mitigation planning, resulting in the same or more damage after the next flood or earthquake. Too often it is assumed that the occurrence of



hazard events and the damage they cause is inevitable (a fatalistic type of attitude) or that an event will not recur, even after a major disaster has just recently taken place (a false sense of security attitude). For example, after a flood which was determined to be a "100-year" event, some people believe that a similar event of the same or greater magnitude will not happen again for another 100 years. The term "100-Year Flood" is another expression for a flood that has a one-percent chance of being equalled or exceeded in a given year.

## MITIGATION IS NOT EASY

Despite some notable successes across the nation, mitigation efforts have often proven disappointing. In part, the lack of success can be traced to technical obstacles, such as the absence of accurate information about the potential location and magnitude of natural and technical hazard effects. However, there are also institutional obstacles, such as limited agency budgets and a lack of enabling authority for mitigation activities which also inhibit effective mitigation efforts. Public attitudes also represent a major obstacle to effective mitigation in many communities. Even where opportunities for mitigation are recognized, they typically receive low priority, except where the memories are still fresh after a major disaster or there is an immediate problem or threat. It is sometimes difficult to worry about the next storm when the sun is shining.

Often, the most promising mitigation measures turn out to be non-structural measures (those affecting the location, design and construction of new development) that are perceived as impediments to economic growth and development. To attain the benefits of development, pressures to ignore mitigation considerations are often intense. One of the principal reasons that hazard mitigation programs often receive little public and political support is that the costs of such programs are immediately identifiable, while potential benefits are generally longer term and less apparent. This condition can be offset, however, through a greater awareness of the benefits of mitigation and the successful integration of state-wide resources working towards a common mitigation goal.

## METHODS FOR DEVELOPING AN EFFECTIVE MITIGATION PROGRAM

The first step is to estimate what significant hazards are facing the community. The key definition is "significant hazard". It is possible that any type of hazard may strike a community: hurricanes, earthquakes, flash floods, tornadoes, etc., but it is literally impossible to mitigate against the entire spectrum of both primary and secondary hazards. Therefore, the emphasis of mitigation is to reduce or eliminate the threat of primary hazards through the enactment of measures which address multiple threats. After identifying the greatest risks facing the community, the next step is to confirm projections, validate the actual existence of the hazard, and identify the location, frequency and magnitude of past events. Once the hazards have been identified, mitigation can act in four ways, as previously mentioned, to avoid or reduce the impact of their effects: acting on, redirecting, interacting with, or avoiding the hazard.

In cases where mitigating the effects of the hazard are limited, impractical, or nonexistent, the mitigation emphasis must be directed towards the interaction of the hazard and the people. For example the public can be educated on what actions should be taken in the event of an earthquake. Further structural measures can be taken to retrofit structures and secure contents to better withstand the effects of various hazards. Not all of these recommendations may be economically or politically

feasible before the next disaster occurs, but this should not be totally disregarded, for the political and economic conditions may change after the disaster has occurred, and those that were not feasible prior to the event may be ripe for implementation during the recovery from the disaster. Those that are feasible prior to the event should be implemented, based on funds available and the effect the recommendation will have on the reduction or elimination of the hazard.

One way to enhance opportunities is to focus on mitigation measures which are relatively easy for agencies and localities to adopt and administer. Local government programs may already participate in mitigation related activities therefore, greater opportunities to influence local action may arise through efforts to incorporate mitigation objectives into established local programs and responsibilities.

### **MITIGATION CAN WORK FOR SOUTH CAROLINA**

Perhaps the most fundamental view of a mitigation program should be in terms of everyday common sense. Good money should not be thrown after bad money and proven failure of a particular practice should not be reinforced. Hurricane Hugo has been labeled "the storm of the century," and has raised public awareness to the very real vulnerabilities which exist in South Carolina. As public service institutions strive to keep pace with state-wide growth and development, efforts may be tempered by a common thread that promotes mitigation awareness and facilitates the adoption of practical measures. A systematic approach to multi-hazard mitigation which encompasses active participation by state and local government can bring a variety of resources to bear on issues which might not be accomplished in other forums. In marshalling these capabilities, cost efficient measures which enhance public safety can be achieved in South Carolina.



## V. A SUMMARY OF MITIGATION CONSIDERATIONS

Note : The following is an extract from the State Hazard Mitigation Plan and is provided to assist in the planning process prior to the development of mitigation measures and for possible grant projects.

### HAZARD ANALYSIS AND VULNERABILITY ASSESSMENT

#### INTRODUCTION

The term "hazard vulnerability" implies a relationship between human population concentrations and their potential for experiencing a hazard occurrence. Population expansion, by its very nature, implies occupation of greater areas of land and occupation of areas prone to hazards. The result, then, is a likely increase in the probability of a community during its history sustaining an impact from a hazard occurrence.

Hazard vulnerability is not new to the citizens of South Carolina. Two Presidential Declarations over the last five years have driven home the very real potential for hazard occurrences. While the risk of occurrence is generally regarded to be uncontrollable, vulnerability to a hazard or multiple hazards can be reduced according to the degree of preparedness practiced by a community. Hazard mitigation is a process in which the impacts of natural and technological hazards on a population are reduced or eliminated. The first step in a hazard mitigation program is to identify the significant hazards. Accordingly, Section III, "Hazard Analysis and Vulnerability Assessment," will enter into a discussion of these hazards.

#### THE STATE OF SOUTH CAROLINA

South Carolina ranks 40th among the fifty states in size with a total area of 30,203 square miles. As of 1987, the State had a population of 3,425,000, 24th in the nation, with a resident population per square mile of 113 persons. Of the 46 counties, the highest population centers include Berkeley, Greenville, Richland, and Spartanburg, each of which have populations in excess of 200,000 people. These counties correspond to the state's four major metropolitan areas, the cities of Charleston, Greenville, Columbia and Spartanburg. Population growth trends over the last decade have exceeded 10% with the most significant increase (>40%) generally experienced in the coastal communities. Projections through the year 2000 indicate that these trends will generally continue as South Carolina reaches nearly four million residents at the end of this century. During this period, some counties may experience a doubling in population. This rapid growth places a substantial responsibility on emergency management officials, since growth will occur in areas of traditionally high vulnerability.

Commercial electrical power for the State is provided by four separate suppliers: Carolina Power and Light Company, Duke Power Company, Lockhart Power Company and South Carolina Electric and Gas Company. Nuclear electrical generation provides 61% over other fuel types. This compares to a national average of 17.7 %. In addition, the nation's only currently operational storage facility for spent nuclear fuel is located in western South Carolina, coterminous with a



reprocessing facility. This level of nuclear activity is high and suggests that state-wide planning for radiological hazards would be prudent.

South Carolina has over 40,678 miles of interstate, primary, and secondary highway systems, of which 790 miles comprise completed interstate roads. Three ports: Charleston, Georgetown, and Port Royal, are primary terminals for commercial waterborne cargo; Charleston is currently the third largest container cargo port on the Eastern Seaboard. Additionally the state has a variety of air terminals and passenger railway lines currently in place.

The textile industry and closely related clothing industry within the State leads the nation in the number of textile machines and ranks as the leading state industry. Tourism ranks a close second and is focused primarily in the low country and oriented to the barrier islands and beaches along the Atlantic Ocean. South Carolina's third most important industry is the harvesting, processing, and manufacturing of wood products. Additionally, over 140 Fortune 500 companies have established manufacturing facilities within the state. While forestry plays a major role in agriculture, the state is also diversified into other agricultural products and is the nation's top producer of peaches.

## GEOGRAPHICAL CONSIDERATIONS

South Carolina is located on the Atlantic coast, bound by North Carolina on the north and Georgia on the southwest. The coastline of the State is varied and diverse. From the Little River Inlet, near the North Carolina border, to Winyah Bay in Georgetown County is an unbroken stretch of beach known as the "Grand Strand." From Winyah Bay to Savannah, Georgia, the coastline is characterized by tidal rivers, inlets, salt marshes, and numerous barrier islands. The topography of the coastal plain, is flat to gently rolling land. The coastal plain terminates at the Fall Line which crosses the State in a northeasterly direction near the city of Columbia. This region contains an area 5-30 miles wide composed of sandy soils and ridges which are referred to as the "sand hills." This region stretches from Marlboro County near the North Carolina border to Aiken County on the west. The topography of the area beyond the Fall Line is upland hilly to steeply rolling terrain and is known as the "Piedmont Plateau". Northwest of the Piedmont Plateau is a very small mountain area with elevations at a few locations in excess of three thousand feet.

South Carolina has more rivers for its size than most states. Generally they flow from the northwest to the southeast and empty into the Atlantic ocean. The middle part of the State, from the mountains to the sea, is drained by the Santee River system. On the southwest edge of the state, the Savannah River separates South Carolina from Georgia. North of the Santee is the Pee Dee river system, which extends all the way into the North Carolina mountains. Additionally, there are three significant man-made lakes or reservoirs: Lakes Murray, Marion and Moultrie.

## CLIMATE

The State has a temperate climate. The average annual temperature varies from 66 F along the coast to 56 F in the mountains. The coldest weather of the winter usually occurs during January and February when the average low temperature drops to around freezing. Minimum temperatures below 0 F are rare. July is the hottest month of the year with many stations reporting an average high temperature of 90 F or above. Daily high temperatures of 100 F or higher occur one or more times during most summers.



The average yearly rainfall is heaviest in northwestern South Carolina. In the mountains, between 70 to 80 inches of rain occurs at the highest elevations. Across the foothills, average annual precipitation ranges from 55 to more than 60 inches. In the eastern and southern portions of the Piedmont, the average annual rainfall is near 50 inches. The driest portion of the State, on average, is the Midlands where the annual average rainfall is 45 to 48 inches. Precipitation amounts are a little higher across the Coastal Plain. A secondary state-wide maximum of 52 inches occurs approximately 20 miles inland from the coast with slightly lower amounts seaward to the coastline. Flood-producing rainfall may occur during any month of the year but is more likely during the late winter or early spring and during the late summer or early fall.

Solid forms of precipitation include snow, sleet, and hail. A snowfall of one or more inches occurs three times during an average winter in northwest South Carolina. The annual depth of snowfall varies from eight inches in the mountains to less than one inch near the south coast. The greatest snowfall in a 24 hour period outside the mountains was 24 inches at Rimini in February 1973.

The variation in relative humidity with the time of day is considerably greater than the day-to-day variations. The highest values of 80 to 90 percent relative humidity are reached at about sunrise and the lowest values of 45 to 50 percent occur an hour to two after noon. There is about a 10 percent difference in the average relative humidity between winter and summer with the summer average being the higher of the two seasons. South Carolina's weather is usually pleasant; however, the state is subject to several types of severe weather, including thunderstorms, tornadoes, hurricanes, and winter storms. Floods, droughts, cold waves, and prolonged hot weather may also adversely affect the economy.

Although thunderstorms are common during the summer, they occur throughout the year. The most destructive thunderstorms frequently accompany the passage of squall lines or active cold fronts and may contain high winds, hail and considerable cloud-to-ground lightning. During recent years, the number of lightning deaths have averaged three to four persons per year, with several times that number of people injured by lightning.

Periods of insufficient rainfall for crops occur during many summers. Severe droughts are infrequent but do occur from time to time. Historical records of droughts in South Carolina are limited. When describing the drought of 1818, Mills (1826) noted that "streams were dried up that were never before known to fail, and some of the rivers fell as low as to stop the navigation of boats." More recently, severe droughts occurred within the state in 1925, 1933, 1954, and 1986.

During recent years, the number of tornadoes in South Carolina has averaged ten per year. While one or more tornadoes have occurred in every month of the year, Spring is the peak season. Sixty percent of the State's tornadoes occur from March through June with April being the peak month. A small number occur in August and September which accounts for 21 percent of the total. The worst tornado day in South Carolina's history was in 1924 when two tornadoes struck the State. The path of each tornado was over 100 miles; these two tornadoes killed 77 persons, injured 778, destroyed 465 homes and many other buildings.

Tropical cyclones affect South Carolina about one year out of two. Many of these occurrences are tropical storms which do little damage, and sometimes bring needed rains. During recent years a tropical cyclone has caused hurricane force winds along some portion of the South Carolina coast at least once each 12 years on the average. Recent hurricanes of category three or higher affecting South Carolina were Hurricane Hazel in 1954, Hurricane Gracie in 1959, and Hurricane Hugo in 1989. The greatest loss of life in South Carolina from a hurricane was in 1893 when an estimated 1000 people were killed along the lower South Carolina Coast. Hurricane Hugo was the costliest hurricane of record with damage estimated near six billion dollars.



Non-tropical coastal storms are most likely during the late fall through early spring. Their effects range from high winds and damaging high tides along the coast to heavy rains, snow or sleet inland. There have been some instances when these winter coastal storms caused high tides as high as a category one hurricane with major damage to beach installation.

Flooding occurs along streams and rivers somewhere within South Carolina several times each year. The most severe river lowland flooding usually follows heavy rains associated with hurricane passage however; the heavy rains of 1990 caused flooding over nearly all regions of the State with millions of dollars in damage to housing and bridges.

## TYPES OF HAZARDS

South Carolina is subject to the destructive effects of a variety of natural influences. While historical occurrence addresses many of these hazards, the potential exists in this state for single or concurrent events across the spectrum of natural influences. The interrelated destructive effects of these occurrences encourages addressing all perceived hazards to facilitate cost effective and efficient mitigation efforts. Accordingly, the following primary hazards provide the basis for mitigation planning.

- EROSION- It is the removal of sand dirt or soil by natural forces in such a manner as to threaten the foundation of a man made structure or threaten to sever a lifeline (road or utility), or cause the loss of shore frontage.
- DAM SAFETY- In the state there exists some 50,000 man-made impoundments that are regulated as dams by the state under the S.C. Dams and Reservoirs Safety Act. Dams that impound water are inherently hazardous no matter how carefully they are regulated and maintained, and a small number of them can be expected to fail every year.
- DROUGHT/DRY SPELL- It is the lack of expected precipitation for a long period of time that adversely affects the safety, health and welfare of the State's citizens and economy.
- EARTHQUAKE It is the violent oscillatory motion of the ground caused by the passage of seismic waves radiating from a fault along which sudden movement has taken place.
- FLOODING- It is the accumulation of water that either inconveniences citizens or causes lives and property to be threatened.

- FOREST FIRE- It is any uncontrolled burning vegetation or associated flammable material and which requires suppression action to protect lives, property, and/or natural resources.
- HURRICANE- It is a tropical cyclone whose maximum sustained winds reach or exceed a threshold of 33 meters per second (74 mph) and may range has high as 90 m/sec (200 mph).
- SUMMER STORM- Storms accompanying fast moving squall lines, producing winds up to 60 mph and higher and attendant heavy rain, possibly hail, and lightning.
- TORNADO- It is a violently rotating column of air pendant from a thunderstorm cloud in the form of a funnel cloud and rotating until it touches the ground.
- WINTER STORM- It is an atmospheric disturbance occurring between cold polar and warm tropical air masses along fronts where air masses of different temperatures and density are unstable and which seek equilibrium. These storms produce heavy snow, freezing rain, and ice.

## MITIGATION OPPORTUNITIES

The emphasis of mitigation is to reduce or eliminate the threat of primary hazards through the enaction of measures which address multiple threats. One way to enhance these opportunities is to focus on mitigation measures which are relatively easy to adopt and administer. These measures have been identified through a systematic assessment of those actions and activities which can achieve effective and cost-efficient reduction of risk.

While the potential array of effective mitigation measures is extensive, it is important to enhance the commitment of resources through a comprehensive approach. With this in mind, areas of special emphasis have been identified that will maximize the synergy of mitigation efforts. These major categories are:

### 1. Education/Training/Public Awareness

Objective: Improve public awareness of hazards, effectiveness of hazards preparation, and better prepare citizens of the state to deal with hazards



- \* workshops
- \* continuing education
- \* drills
- \* education requirements (K-16)
- \* videos, manuals, and pamphlets

2. Human Services/Public Health

Objective: Minimize physical and emotional suffering associated with hazard occurrences

- \* immunizations
- \* water and food supply
- \* psycho - social trauma treatment
- \* emergency medical supplies
- \* shelter
- \* sanitary needs

3. Lifelines and Infrastructure

Objective: Minimize the disruption of vital services associated with hazard occurrences

- \* electric supply
- \* gas, fuel, telephone and telecommunications
- \* water and sewer
- \* transportation and navigation

4. Buildings and other structures

Objectives: Enhance the integrity of manmade structures in order to better resist hazard occurrences

- \* retrofit
- \* emergency structures
- \* structural redundancy
- \* codes and guidelines
- \* flooding

5. Natural Resources

Objective: Reduce the susceptibility of agriculture, forestry and other natural resources to hazard occurrences

- \* agriculture
- \* forestry
- \* erosion
- \* water, courses & bodies
- \* fish & wildlife

6. Private Sector Involvement

Objective:                      Orchestrate private sector involvement in the emergency management process

- \* insurers
- \* lenders
- \* utilities
- \* equipment manufacturers & supplies
- \* professional associations

7. Public Sector Action

Objective:                      Provide a systematic plan and process to guide governmental actions

- \* legislation and public policy
- \* law enforcement
- \* coordination

8. Emergency Management Systems

Objective:                      Provide mechanisms to ensure the effective use of resources before, during and following a hazard occurrence.

- \* communications
- \* data base management
- \* warnings
- \* plan and procedures
- \* media



## VI. THE 404 PROCESS AND MITIGATION

Note: The following steps provide a framework for the planning, development, and submission of potential 404 projects within the mitigation program

- 1) **Analyze the Problem:** What are the most significant natural hazards and where and how do they impact upon people and man-made structures? How does your entity (state, local, county) intend to deal with the problem (s)?
- 2) **Design a Plan of Action:** Based upon the findings of the analysis, what can be done to minimize or eliminate the effects of these natural hazards upon people and property? The answer can usually be found in governmental, private sector, or local community actions, or a combination of all of these. A plan should be designed to identify significant hazards, existing mitigation activities, and key players and mitigation opportunities. The importance of a plan cannot be understated because the plan provides the basis for budgeting and various information collecting activities which are critical in the implementation of mitigation measures.
- 3) **Develop Mitigation Objectives:** Once the state, county, or municipal plan has been designed, the next step is to develop mitigation objectives. From these objectives specific measures are then established and prioritized for implementation. Objectives usually cover broad areas (similar to those outlined in the extract from the state plan in this pamphlet), while measures focus in on specific actions or tasks which contribute to the achievement of the objective.
- 4) **Update the Plan/Objectives:** Whenever a natural disaster strikes, it brings with it opportunities for mitigation. This is a time when public awareness of the hazard is at a peak and should be capitalized upon. Additionally, the hazard occurrence may bring to light other mitigation measures not previously included in the initial planning process. The mitigation planning process should be considered a dynamic one, always changing. Therefore, the plan and mitigation objectives should be updated whenever significant changes arise in order to stay as current as possible.
- 5) **Identify Funding Sources:** The best selling point for mitigation is that a strong measure can save money by offsetting losses from natural hazards. Funding can be derived from a variety of sources: The annual budget process, the bond process, co-op and partnerships with private industries where mutual benefits from a mitigation measure can be derived, and packaging with various state and federal programs. A final alternative is to package the project with 404 funding if eligibility criteria can be met.

6) **Conduct 404 Screening:** Once the decision has been made to apply for 404 funding, the most important step is to screen the projects for potential eligibility within the 404 program. These are the criteria which the State and Region IV use in project reviews:

- The applicant is a state or local government, private non-profit organization, or Indian tribe within a Presidentially Declared Disaster Area.
- The project conforms with the state plan (based upon guidance provided in this pamphlet).
- The project has a beneficial impact on the designated area covered under the Presidential Disaster Declaration.
- The project is environmentally sound.
- The project solves a problem and will be implemented.
- The project is cost effective in terms of reduction of potential future losses and substantially reduces risk.
- The problem that is being addressed is repetitive or significant.
- The project will not cost more than the anticipated value of the reduction in vulnerability.
- The project is determined to be the best alternative after a range of options were considered.
- The project contributes to a functional part of or is, in itself, a long term and complete solution to the problem
- The project considers long term changes and future requirements.
- The project does not duplicate funding which is potentially available under other Federal sources.
- The project achieves one or more of the following objectives:
  - Structural hazard control or protection
  - Construction activities for protection
  - Retrofitting of facilities
  - Acquisition or relocation of land or facilities
  - Development of mitigation standards
  - Development/Implementation of comprehensive mitigation program
  - Development/improvement of warning systems.

To assist in the screening process, a draft of the detailed project description Attachment 2 (within the enclosed package) should be prepared. A preliminary review may be requested from the state and FEMA Region IV prior to formal project submission, to determine potential eligibility in the 404 program. **Remember-** the type of



project which will have the best potential for successful funding is a "hard" project vice one which focuses on programmatic efforts. Hard projects may be characterized as traditional **"brick and mortar"** projects which minimize or reduce future losses. Based upon past experience, these include, but are not limited to:

- Structural retrofitting of structures against wind, floods, or seismic effects;
- Structural retrofitting of essential facilities (shelters, aid stations, etc);
- Hardening or protection of essential service facilities (water, sewer treatment, communications, electrical power);
- Alternative power sources (generators);
- Levees or Flood walls;
- Elevation of structures above flood plain;
- Relocation of structures out of flood plain;
- Flood or other hazard warning systems;
- Increasing bridge construction standards;
- Acquisition of land in hazardous area to regulate development;
- Construction of Stormwater Pump stations and Drainage Systems.

- 7) **Prepare the Application:** Upon determination that a respective entity desires to formally participate in the 404 program, the next step is to prepare the grant application. In making the decision, be prepared to commit a significant amount of staff work and time to the process. If possible, seek out personnel who are experienced in the grant process for their assistance and expertise. The instruction guide and model grant application are provided in this pamphlet to aid in the grant preparation. Some key considerations in the staffing process include:

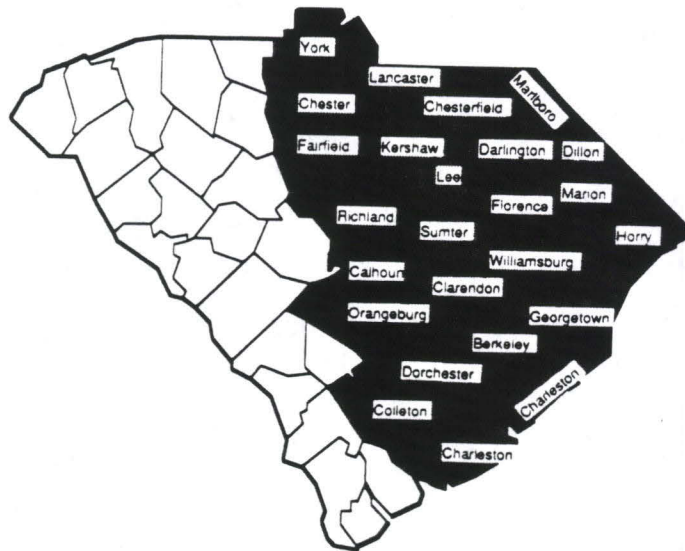
- Some research of local and state records is normally required to accurately portray the scope and nature of the problem and its effects. (number of occurrences, magnitude, damage, financial losses etc.)
- Supporting documentation (plans, pictures, maps, drawings, studies, etc) will provide more credibility for the application and should be referenced and provided wherever possible.
- The packaging itself should be neat, orderly and presented in a professional manner.

- 8) **Submit the Application:** Normally, an application period will be established by the State for submission of potential 404 projects. The applications should be submitted with a cover letter from the appropriate head of government outlining support for the proposal. Once the project is received at the state level, it will be reviewed based upon the criteria set forth in paragraph 6 of this section for completeness, eligibility, and consistency with state objectives. Depending upon the number of applications received, a prioritizing process may be used if funding availability for 404 projects is insufficient to cover the projects requested. Those applications which are deemed to be eligible for 404 funding, but require additional information, will be returned to the entity that submitted the project with a letter requesting additional information.

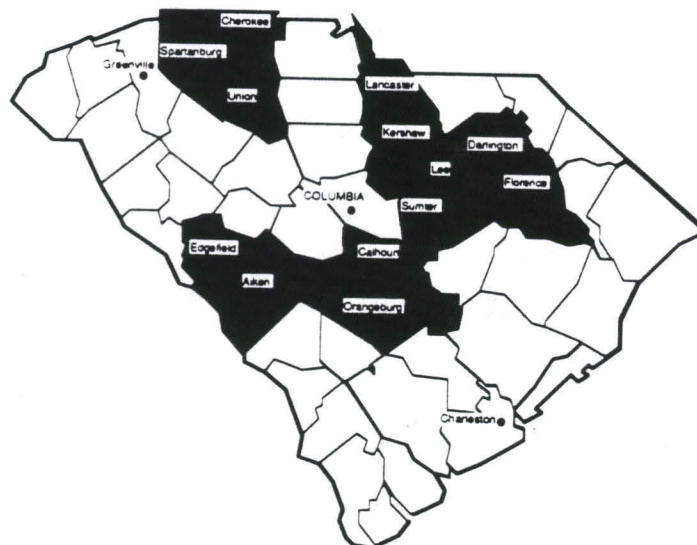
Complete applications will be forwarded for consideration by FEMA Region IV under a state letter. A good application with no required additional staffing can expect a six to eight week turn around back to the applicant. Applications which require additional staffing will generally have a longer turn around period.

- 9) **Funding the Application:** Upon approval of a project by FEMA, the funding of the federal share of the project will be administered out of the Governors Authorized Representative/Disaster Public Assistance Office for the pertinent disaster. Quarterly progress reports will be required to be submitted by the applicant to allow for the monitoring of the project's implementation. Federally funded administration costs will be provided to help defray the cost of grant administration on the part of the applicant.

Maps of Presidentially Declared Counties



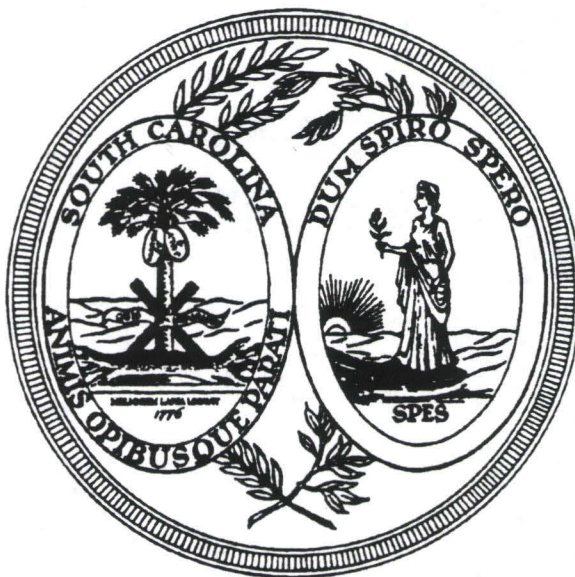
Hurricane Hugo, September 1989



Floods, October 1990



# MODEL GRANT APPLICATION



**Note:** This model is intended to demonstrate techniques and to act only as an instructional guide to the formulation of a grant application.

<b>PROJECT APPLICATION</b> <b>HAZARD MITIGATION PROGRAM 404 GRANT</b>		State Project No. HMSC-MODEL- 01	Date 1/20/91
County South County		Pertinent Disaster Declaration <input checked="" type="checkbox"/> Hugo 1989 (FEMA 843 DR-SC) <input checked="" type="checkbox"/> Floods 1990 (FEMA 881-DR-SC)	
1. Applicant (Subgrantee): City of Carolina		2. POC:      Name: John B. Doe Phone No.    (803) 222-3333	
3. Project Title: Stormwater Pump Station and Drainage Management System		4. Total Cost Estimate: \$3,594,610	5. FEMA Funding Requested: \$1,797,305
6. Location of Project: Calhoun District			
7. Brief Description of Measure/Scope of Work: To construct two 57,000 gpm (gallon per minute) pump station in order to eliminate the flooding which occurs from stormwater runoff in the low-lying areas of Miller and Clifton Street Drainage Basin. These two areas were identified as being of critical priority, by the drainage study completed for the city in 1990. The two areas which were identified by the study as being critical priority sectors were done so because of the hazards which are potential threats to loss of life and damage to property from the flooding, which is a direct result from the stormwater runoff in the low-lying areas of the city.			
8. Attachments			
1. Application for Federal Assistance (SF 424)			
2. Detailed Project Description			
3. Subgrantee Financial Capability Survey			
4. Section 404 Project Environmental Considerations			
5. 404 Work Schedule/ Summary Report			
6. 404 Project Budget			
7. Additional supporting documents (Studies, Plans, Drawings, Letters, etc.)			
a. Map Outlining Affected Areas			
b. SC DHEC studies for Calhoun District (1986, 1988, 1989)			
c. 1990 Comprehensive Drainage and Stormwater Management Plan			
d. Preliminary Engineering Plans, Drawings and Specifications			
e. Financial Capabilities Documentation			



# APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0047

<b>1. TYPE OF SUBMISSION:</b> Application <input checked="" type="checkbox"/> Construction <input type="checkbox"/> Non-Construction Preapplication <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction		<b>2. DATE SUBMITTED</b> 1/20/91	<b>Applicant Identifier</b>  <b>3. DATE RECEIVED BY STATE</b>  <b>4. DATE RECEIVED BY FEDERAL AGENCY</b>																												
<b>5. APPLICANT INFORMATION</b>																															
<b>Legal Name:</b> City of Carolina		<b>Organizational Unit:</b> Municipality																													
<b>Address (give city, county, state, and zip code):</b> City of Carolina, South County 1313 Mockingbird Lane Suite 20 Carolina, SC 29696		<b>Name and telephone number of the person to be contacted on matters involving this application (give area code):</b> Mr. John Doe (803) 222-3333																													
<b>6. EMPLOYER IDENTIFICATION NUMBER (EIN):</b> 29 - 4567890		<b>7. TYPE OF APPLICANT: (enter appropriate letter in box)</b> <span style="border: 1px solid black; padding: 0 5px;">C</span> A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District H. Independent School Dist. I. State Controlled Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify): _____																													
<b>8. TYPE OF APPLICATION:</b> <input type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es): <input type="checkbox"/> <input type="checkbox"/> A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration Other (specify): _____		<b>9. NAME OF FEDERAL AGENCY:</b> FEMA																													
<b>10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:</b> 8 3 . 5 1 6 <b>TITLE:</b>		<b>11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:</b> Stormwater Pump Station and Drainage System																													
<b>12. AREAS AFFECTED BY PROJECT (cities, counties, states, etc.):</b> City of Carolina, Calhoun District South County, South Carolina		<b>13. PROPOSED PROJECT:</b> Start Date: 6-91 Ending Date: 1-93																													
<b>14. CONGRESSIONAL DISTRICTS OF:</b> a. Applicant b. Project		<b>15. ESTIMATED FUNDING:</b> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:20%;">a. Federal</td> <td style="width:10%;">\$</td> <td style="width:40%;">1,797,305</td> <td style="width:10%;">.00</td> </tr> <tr> <td>b. Applicant</td> <td>\$</td> <td>1,697,305</td> <td>.00</td> </tr> <tr> <td>c. State</td> <td>\$</td> <td></td> <td>.00</td> </tr> <tr> <td>d. Local</td> <td>\$</td> <td></td> <td>.00</td> </tr> <tr> <td>e. Other</td> <td>\$</td> <td>100,000</td> <td>.00</td> </tr> <tr> <td>f. Program Income</td> <td>\$</td> <td></td> <td>.00</td> </tr> <tr> <td>g. TOTAL</td> <td>\$</td> <td>3,594,610</td> <td>.00</td> </tr> </table>		a. Federal	\$	1,797,305	.00	b. Applicant	\$	1,697,305	.00	c. State	\$		.00	d. Local	\$		.00	e. Other	\$	100,000	.00	f. Program Income	\$		.00	g. TOTAL	\$	3,594,610	.00
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d. Local	\$		.00																												
e. Other	\$	100,000	.00																												
f. Program Income	\$		.00																												
g. TOTAL	\$	3,594,610	.00																												
<b>16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?</b> a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____ b. NO. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW		<b>17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?</b> <input type="checkbox"/> Yes If "Yes," attach an explanation. <input type="checkbox"/> No																													
<b>18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT. THE DOCUMENT HAS BEEN ONLY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED</b>																															
<b>a. Typed Name of Authorized Representative</b> John B. Doe		<b>b. Title</b> Administrator																													
<b>d. Signature of Authorized Representative</b> John B. Doe		<b>c. Telephone number</b> 222-3333 <b>e. Date Signed</b> 1/20/91																													

Previous Editions Not Usable

Standard Form 121 REV. 1-89  
Prescribed by OMB Circular A-102

Authorized for Local Reproduction

## INSTRUCTIONS FOR THE SF 424

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

Item:

Entry:

Item:

Entry:

1. Self-explanatory.
2. Date application submitted to Federal agency (or State if applicable) & applicant's control number (if applicable).
3. State use only (if applicable).
4. If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank.
5. Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application.
6. Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service.
7. Enter the appropriate letter in the space provided.
8. Check appropriate box and enter appropriate letter(s) in the space(s) provided:
  - "New" means a new assistance award.
  - "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date.
  - "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation.
9. Name of Federal agency from which assistance is being requested with this application.
10. Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested.
11. Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project.
12. List only the largest political entities affected (e.g., State, counties, cities).
13. Self-explanatory.
14. List the applicant's Congressional District and any District(s) affected by the program or project.
15. Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15.
16. Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process.
17. This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans, and taxes.
18. To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)



## ASSURANCES — CONSTRUCTION PROGRAMS

Note: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure nondiscrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§ 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686) which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794) which prohibit discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101-6107) which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 93-255), as amended, relating to non-discrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to non-discrimination in the sale, rental or financing of housing; (i) any other non-discrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements on any other non-discrimination Statute(s) which may apply to the application.



11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), the Copeland Act (40 U.S.C. § 276c and 18 U.S.C. § 874), the Contract Work Hours and Safety Standards Act (40 U.S. §§ 327-333) regarding labor standards for federally assisted construction subagreements.
14. Will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (c) notification of violating facilities pursuant to EO 11738; (d) protection of wetlands pursuant to EO 11990; (e) evaluation of flood hazards in floodplains in accordance with EO 11988; (f) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§ 1451 et seq.); (g) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. § 7401 et seq.); (h) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (i) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§ 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and preservation of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.
19. Will comply with all applicable requirements of all other Federal laws, Executive Orders, regulations and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL <i>John P. Dot</i>		TITLE <i>Administrator</i>
APPLICANT ORGANIZATION <i>City of Corvallis</i>		DATE SUBMITTED <i>1-20-91</i>



**DETAILED 404 PROJECT DESCRIPTION**

(Use continuation sheets as necessary)

- 1.) Project Title Stormwater Pump Station and Drainage Management System
- 2.) Prepared by: John B. Doe Phone: (803) 222-3333
- 3.) Disaster Declaration occurred as a result of:  
☒ Hurricane Hugo: September, 1989 ☒ Flooding: October, 1990
- 4.) Classification of Project:(Check Appropriate Box)
- |   |                                     |
|---|-------------------------------------|
| Structural hazard control or construction activity to reduce hazard damage  | <input checked="" type="checkbox"/> |
| Retrofitting of facilities  | <input type="checkbox"/>            |
| Acquisition or relocation   | <input type="checkbox"/>            |
| Development of a comprehensive hazard mitigation program with state and local hazard mitigation standards and with implementation as an essential component | <input type="checkbox"/>            |
| Development or improvement of warning systems   | <input type="checkbox"/>            |
- 5.) Provide a detailed description of the problem to be addressed by this project.  
See attached Sheets

a.) Is the problem repetitive? Yes/No. (Provide a historical overview of past occurrences, related damages, and financial estimates of losses incurred.)

**5. Provide a detailed description of the problem to be addressed by this project.**

Answer) During periods of moderate to heavy rains, coupled with the rising water levels of the Hazard River, low-lying areas within the City of Carolina become flooded at levels up to four feet due to backflow from the river and the inability of the existing 50-year old gravity-operated drainage system to accommodate stormwater runoff. With an average annual occurrence of two to three times, two major evacuation routes, Miller and Clifton Streets, become impassable because of the rising elevations of the stormwater runoff (See enclosed Map outlining affected flood areas to include types of structures and occupants.)

A large subdivision of apartments, condominiums, low income, and single family dwellings of historical value as well as some adjoining commercial property has been established between Miller and Clifton Streets. The Calhoun District contains some 2,000 units, of which 278 are low income, with a total population of 7,250 persons. During periods of heavy rainfall and flooding, a number of these dwellings routinely receive flood water through ground floors and basements, forcing the evacuation of over 2,500 high risk residents when flood waters reach over two feet in height.

Summarized, three significant problems arise as a result of the inability of the stormwater system to accommodate flood waters. They are in priority of seriousness: 1) Maintenance of critical transportation arteries during periods of heavy rains; 2) Eradication of health problems resulting from standing water and water infiltration into dwellings; 3) Elimination of damage to personal property and both short and long term damage to structures inundated by flood waters.

**(a) Is the problem repetitive? Yes/No. (Provide a historical overview of past occurrences, related damages, and financial estimates of losses incurred.)**

answer) Yes. With the State's temperate climate, the City of Carolina receives an average of 60+ inches of rainfall annually. When the combination of seasonally high river levels and significant rainfall occurs, the resulting flooding renders several of the major evacuation routes impassable while also flooding the Calhoun District at Miller and Clifton Streets. The damages paid by the city for the retrofitting of property damage due to flooding averages \$750,000 annually. Included within the graph below are the losses addressed under Public and Individual Assistance Programs for the Presidential Disaster Declarations following Hurricane Hugo and the flooding of October 1990. A voluntary survey of residents and businesses which filed Flood Insurance Claims was also used to determine damage losses over the five year period.



### 5-Year Study of Flood Occurrences in Calhoun District

<u>Year</u>	<u># of Occurrences</u>	<u>Average-Flood level</u>	<u>Date</u>	<u>Damage Claims</u>
1986	2	3.9	6/18;10/1	\$ 700,240.00
1987	3	3.9	7/16;9/15;11/1	\$1,050,250.00
1988	1	3.1	3/18	\$ 375,110.00
1989	3	4.4	2/12;5/26;9/12	\$1,000,500.00
1990	2	4.7	4/18;10/21	\$ 675,000.00

While the city did not keep historical records of private property loss (automobiles, private homes, and other personal property), personal losses associated with the latest flooding during the heavy rains of October 1990 were in excess of \$225,000. Commercial losses for the Calhoun District resulting directly from Hugo and the 1990 flooding were reported by the Chamber of Commerce to be over \$475,000 and \$178,000 respectively. These figures include damaged merchandise and lost business opportunities due to businesses being closed as a result of flooding and other structural damages.

**(b) Does the problem present a significant risk to public health and/or safety if not solved? Yes/No. How?**

answer) Yes. The primary objective is to maintain clear and passable evacuation routes through the city for emergency vehicles and other public and private transportation. During recovery following Hugo and the 1990 flooding, utility vehicles and crews could not effectively and safely operate in many areas of the Calhoun District to repair and restore critical utility services. Further, there also exists significant health and safety risks for those families in the housing developments due to extensive flooding which occurs in the first level of the dwellings. The weakening of building structures due to rotting of wood and extreme foundation settling has resulted in the condemning of over 25 structures valued at over \$2.2 million. The potential health problems presented by stagnant standing water, poses a significant health problem for the city. In three studies completed by DHEC over the past six years, it was determined that the flooding, which spreads throughout the bottom levels of businesses and residential structures, posed a significant health risk. DHEC found that the resulting flooding left stagnant standing water after flood levels subsided, providing a breeding ground for a large mosquito population as well as harboring an increasing rodent population. Further, infiltration of water into over 200 structures has resulted in standing mold and mildew with potential bacteria formation exceeding State and Federal health standards. In order to eliminate these growing health problems, the DHEC studies determined that the only way to properly address this problem was by significantly reducing the extent of the flooding levels.



**(c) What is the scope of the population affected?**

answer) The residential population within the two identified areas is some 7,250 persons based upon the 1980 census. In addition, the evacuation routes which pass through both identified areas are the major egress routes for commuters working within the city limits. The traffic count taken in March 1989 by the city highway department for the route of Miller and Clifton Streets determined the approximately 20,074 vehicles use the Miller Street roadway on a daily basis. The study taken on Clifton Street by the highway department found that 21,840 vehicles use this street daily. This project will reduce flooding on both roads and provide operational evacuation routes for a downtown residential population of over 37,000 people as well as a working population of an addition 23,000 people. Because of the historical significance and value of the buildings in up-town Carolina, the down town area has become a tourist "hot spot". Based upon a 3-year study on average tourist population by the city's Division of Recreation & Tourism, it has been calculated that during peak seasonal times the City of Carolina receives some 700,000 tourists annually. With the residential population of 37,000 and a daily population of an additional 23,000 linked with a tourist population of 700,000 seasonally, the City of Carolina is faced with a significant problem of evacuation if flooding events occur during the year.

**6. Does the project solve the problem independently and/or constitute a functional portion of a solution to the problem? Yes/No How?**

answer) Yes. In addition to mandated participation in the National Flood Insurance Program, the City of Carolina has developed a Comprehensive Drainage & Stormwater Management Plan based upon the information collected from a study completed for the city in 1990. This study identified the Calhoun District as a critical priority on the list of projects to be completed. When completed, the pumpstation project will constitute a functional portion of the intended floodwater management plan for the city. Two other elements which will enhance this overall management plan will be the completion of a future secondary pumpstation as well as flood walls and levees along certain points of the Hazard River to prevent flooding in the low-lying areas adjacent to the river when the water level of the river supersede its banks. By addressing the critical priority projects like the stormwater pumpstation and others that have already been identified, the City of Carolina hopes to reduce the risk to property and potential loss of life from future hazards. A copy of the Comprehensive Drainage and Stormwater Management Plan is included as an attachment.

**(a) What impact will the project have on the declared area?**

answer) The project, when completed, will eliminate the flooding in both the Miller and Clifton Street areas for all 10 year storms as well as a 95% coverage for 30 year storms, ensuring operational evacuation routes for the 42,000+ vehicles and providing safer, more sanitary living conditions for the residents of the Calhoun District. All health and environmental concerns



identified within the DHEC studies will be completely addressed through this project. Further degradation of structures due to ground water will also be arrested in the District.

**(b) What is the impact if the project is not funded? (include analysis of continuing losses, and imminent threats to public health, safety and/or property as appropriate.)**

answer) If not funded, the flooding, which occurs several times annually, in the low-lying areas of Clifton and Miller Street will go on unchecked. If allowed to continue, the flooding will force the evacuation and abandonment of approximately 125 of the 2,000 dwellings in the Calhoun District over the next five years. The cost of property acquisition, relocation and new construction for these residents is estimated at \$26,250,000. Further, the historical annual losses in structural damages of \$750,000 will continue unabated. The problem of inoperable evacuation routes due to flooding will also not be addressed and will pose a threat of potential loss of life should there be a need to evacuate the residents of Carolina. Also, utility and emergency service response will continue to be hampered and will be forced to face unsafe operating conditions. Further, environmental and health concerns will continue to fester throughout the District.

**7. Has the project been determined to be the most practical, effective and environmentally sound alternative after consideration of a range of options? Yes/No. What were the other options considered, and why is this measure the most appropriate solution?**

answer) Yes. This project was developed based upon the information collected by a study completed for the City of Carolina in 1990. This study identified and prioritized necessary drainage improvements based upon cost effectiveness and benefits to the population served. This project was rated as the critical priority on the list of alternatives under consideration by the city. The other considered alternatives included elevation of structures and roadways within the floodplain, gradual relocation of structures and roadways out of the floodplain, and the no-action option. None of these options were considered viable or cost-effective in light of the significantly higher costs associated with each one. Based upon the Environmental Analysis conducted in support of this project, the project is the most environmentally sound option for the city, and will not introduce non-degradable pollutants into the Hazard River. All necessary permits and licenses have been obtained in order to complete this project. (See the Environmental Analysis, Attachment 4 in this package.)

**8. Does the project contribute to the long term solution of the problem it intends to address? Yes/No How?**

answer) Yes. The completion and continued maintenance of this project addresses all first priority flooding threats currently facing the city and will enhance the city's ability to redirect future stormwater runoff.

**(a) Does the project consider future changes in the area impacted? Yes/No How?**

answer) Yes. The current residential and business population has remained stable over the last five years due to a series of ordinances implemented under the city's 1985 Master Plan for Regulated Development and Historical Preservation. When completed, this project will address all projected changes in the next 20 years.

**(b) Does the project have manageable future maintenance and/or modification requirements? Yes/No (Explain)**

answer) Yes. Future maintenance costs have been programmed into the city's Division of Public Works and Maintenance's budget. All maintenance activities can be accomplished with existing personnel. All modifications for future linkage into projected secondary arteries of the drainage system have been incorporated into this project.

**(c) What are the projected costs for future maintenance of the project?**

answer) Future maintenance costs are estimated at \$5,000 per year.

**9. What is the cost of the project? \$3,594,610**

**Is the project cost effective? Yes/No. How? i.e. Will the project cost less than the payoff in damages related to the recurring problem? Detailed cost and benefit analysis should be computed on a net present value basis in relation to information provided in question 5a, 6b, and 8c.**

answer) Yes. It is impossible to put a value on a human life, but as stated in an earlier question, this project was selected based upon its cost effectiveness. The present day replacement cost for the Calhoun District runs approximately \$350 million based upon 1989 tax records. This does not take into account the historical significance of many of these structures to the City of Carolina. In addition, the annual repair cost for structures damaged in recurring flooding exceed \$600,000 in 1990. As stated in question 5(a), part of the Comprehensive Drainage and Stormwater Management Plan completed for the City of Carolina was to record the number of times significant flooding occurred along with estimated damages which include public assistance, individual assistance and insurance claims for each flood occurrence. Based upon the number of occurrences in this plan, coupled with the projected estimate of future flooding occurrences and the possible damages which will be incurred, the city has determined that with the completion of the stormwater pumpstations the city would save, over a 5-year period, an estimated \$3.75 million in structural damage payments, not including personal property and business losses, or the condemning of structures.



### DETERMINATION OF COST EFFECTIVENESS

Project cost + Maint. cost/yr	Historic Struct. Losses (annual)	Projected Struct. Losses (annual)	Historical Condemned Losses	Future Condemned Losses
\$3,594,610 <u>+ \$5,000</u>	<u>\$750,000</u>	<u>\$750,000</u>	<u>\$2,200,000</u>	<u>\$26,250,000</u>

### 5 YEAR COST ANALYSIS PROJECTION

Future Structural Losses	\$3,750,000	Project Cost	\$3,594,610
Future Condemned Losses	<u>\$26,250,000</u>	5 Yr. Maintenance.	<u>\$25,000</u>

Total Cost    \$30,000,000 in losses    vs.    \$3,619,610 in project costs.

10. Are there any other primary Federal funding sources which would duplicate potential funding of this project? Yes/No If yes, cite cognizant agencies, the funding program, and why this funding is not being used.

answer) No

(a) Will this project be packaged with other Federal, State, or local program funding sources to achieve a comprehensive solution to the problem? Yes/No. If Yes, cite the program, agency and amount of funding.

answer) Yes. The city has applied for and will use \$100,000 in Community Development Block Grant funding based upon the qualifying components of this project.

11. What are the mitigation strategies to be observed in the implementation of this project?

answer) It is the intent of this project that the City of Carolina redirect the natural hazard of flooding, which is a recurring annual event. By redirecting the stormwater runoff to drainage outlets in the river, the potential for property damage and loss of life is significantly reduced. The overall strategy for the flood abatement program has three main components: 1) Address acute flooding in Carolina with the installation of two 57,000 gpm pump stations in the Calhoun District over the next two years; 2) Address secondary flooding in five other areas of the city with the installation of five 10,000 gpm pump stations over a five year period; 3) Construct a combination of floodwalls and levees along the

Hazard River to eliminate flooding potential during river flood stages due to heavy rains, over a ten year period.

**(a) Does the project complement other Federal/State programs or objectives?**

answer) In addition to satisfying program requirements of the State Hazard Mitigation Plan, upon completion, this project will accomplish the following: 1) Enhance implementation of the S.C. Emergency Preparedness Divisions evacuation plan for the region; 2) Satisfy health and environmental concerns posed in three S.C. DHEC reports; 3) Achieve resolution of a primary CDBG objective in the preservation of low income housing in the Calhoun District; 4) Implement a Comprehensive Stormwater Management Program in conjunction with S.C. Land Resources Conservation Commission's guidelines; 5) Reduce the threat of flooding and its effects on housing in support of FEMA and S.C. Water Resources Commission's Floodplain Management Program

**12. Provide a mitigation project description, complete with objectives and implementation measures.**

answer) Construct two 57,000 gpm pumpstations in an upgrade of the existing main drainage system arteries along the area of Clifton and Miller Streets. The pumpstations will enable the old gravity-operated system to overcome the existing backflow problem from the discharge points in the Hazard River when the river reaches floodstage during heavy rains. An engineering survey conducted in 1990 indicated that the existing concrete drainage arteries are structurally capable of accommodating the operation of a forced water system of this magnitude. The project will consist of upgrades and modifications to 20 intake and 6 outlet points in the existing system as well as installation of a cross flow artery between the stations to accommodate the pumpstation operation. (A copy of the preliminary engineering plan, drawings, and specifications are included in this package as an enclosure)

The objectives for this project include: 1) Reduction of flooding by 95% in the roadways and major evacuations arteries in the Calhoun District (up to a 30 year storm); 2) Reduce flooding by 100% (up to a 10 year storm) around all structures in the Calhoun District.

The implementation measures and projected time frames include: 1) Conduct preliminary analysis, site survey, and prepare scope of work (completed); 2) Arrange for environmental site survey and permits(completed); 3) Solicit engineering and design bids (completed); 4) Solicit project bids and award contracts (To be completed within 6 months of grant award); 5) Begin work on upgrade and modifications of intake and outlets (To be initiated within 9 months of grant award); 6) Commence construction of pumpstation complex (To be scheduled); 7) Commence construction of overflow artery (To be scheduled); 8) Install pumpstations (To be scheduled).



ATTACHMENT 3

**SUBGRANTEE  
FINANCIAL CAPABILITY SURVEY**

Prepared by: Lynda Carter (Director) Date: 1/20/91

Phone: (803) 222-4444

1. Subgrantee Name, Address, and Telephone Number:

City of Carolina

1313 Mockingbird Lane Suite 20

Carolina, SC 29696

(803) 222-3333

2. Name, Title and Telephone Number of Chief Executive Officer and Chief Financial Officer:

Mayor John Q Smith (803) 222-5555

Financial Director Lynda Carter (803) 222-4444

3. Type of Entity:

Local Municipality

**SECTION II ACCOUNTING SYSTEM**

1. The accounting method used for recording and reporting financial information is:

Cash \_\_\_\_\_ Accrual \_\_\_\_\_ Modified Accrual xxx

## FINANCIAL CAPABILITY SURVEY

page 2

2. The accounting method used for recording and reporting financial information is:

Manual \_\_\_\_\_ Automated xxx

3. Briefly describe the Books of Account used by the applicant:

The accounts of the city are organized within five  
major categories which are: General Funds, Special Revenue,  
Capital Project, Enterprise, and Trust Fund. Each category  
is considered to be a separate accounting entity with the  
operations of each fund category defined on separate self-  
balanced accounts.

4. Does the applicant's accounting system provide for the accumulation and recording of revenue by grants?  
Yes ☒ No ☐
5. Does the applicant's accounting system provide for accounting and recording expenditures by grants and cost categories?  
Yes ☒ No ☐
6. Does the applicant use an operating budget to control funds by activity?  
Yes ☒ No ☐
7. Does the applicant prepare an internal monthly financial report?  
Yes ☒ No ☐
8. Does the applicant have an approved Indirect Cost Rate? No If yes, attach a copy. If no does the applicant have an approved cost allocation plan? Yes  
If yes, attach a copy.
9. Does the applicant have written accounting procedures?  
Yes ☒ No ☐ (if yes, attach a copy)



**SECTION III GENERAL INFORMATION**

1. To whom does the Chief Financial Officer report? City Council and Mayor  
(attach organizational chart)
2. Does the applicant have written Personnel Policies and Procedures?  
Yes ☒ No ☐ (If yes, attach a copy)
3. Does the applicant have Fidelity Bond Coverage for responsible officials?  
Yes ☒ No ☐ (If yes, attach a copy)
4. Does the applicant have an agency-wide audit conducted annually?  
Yes ☒ No ☐ (If yes, please attach a copy of most recent audit. If no,  
please attach a copy of each funding sources most recent audit,( i. e. H/S,  
USDA, COA, etc.)
5. List positions authorized to sign checks for the applicant:

Mayor: John Q. Smith

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Financial Director: Lynda Carter

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Asst. Fin. Dir: Benny Hill

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**SECTION 404**  
**PROJECT ENVIRONMENTAL CONSIDERATIONS**

Projects funded under Section 404 must comply with certain environmental requirements. The first step is to determine if the individual project is categorically excluded from the need to prepare an Environmental document. The types of projects that do not need the environmental analysis are those which will not result in any physical change to the environment. Such projects include:

- \* Training activities,
- \* Public education programs,
- \* Studies that involve no commitment of resources other than manpower and funding, and
- \* Technical assistance activities.

A. If it is determined that a project meets the categorical exclusion criteria, provide a brief explanation, describing the project and why there will be no impact to the environment.

B. All other projects should include an environmental analysis to aid in the compliance with environmental requirements. This analysis should contain:

1. **Need for the proposed action: What is the problem/issue that is being addressed?** During periods of moderate to heavy rainfall coupled with rising water levels along the Hazard River, low-lying areas within the city receive significant and costly amounts of flooding. Several businesses along with the Calhoun District residential development experience severe flooding in the bottom levels of the building structures. Egress routes from the city also become inundated with flood waters, presenting significant potential for loss of personal property as well as possible loss of life.
2. **Description of the proposed action, including location (if applicable), all actions associated with implementing the mitigation project, and timing of project implementation.** Construction of two 57,000 gpm stormwater pump stations to eliminate flooding in the low-lying areas of the Dogpatch Drainage Basin. Two identified areas include the two major evacuation routes of the Miller and Clifton Street thoroughfares. Design of the project is in the process of being completed and will be ready for construction upon approval of this Hazard Mitigation Project for the city of Carolina.



## PROJECT ENVIRONMENTAL CONSIDERATIONS

Page 2

### 3. Alternatives considered, including the no action alternative.

The other alternatives under consideration include the "no action" alternative and the development of retention ponds alternative. The "no action" alternative would allow the continued loss of property and possible loss of life from the unchecked flooding. The insufficient amount of land, along with the entire city's relatively low elevation prohibits the possibility of developing the retention pond alternative any further.

### 4. An analysis of the environmental effects of the proposed project. The following questions need to be answered with a Yes (with explanation), No or Not Applicable to address this item.

#### LAND USE AND SOCIOECONOMIC ISSUES

Yes

No

- a. Is the proposed project inconsistent with the land use in the area?
- b. Does the project conflict with local zoning ordinances
- c. Will the project result in the relocation of any structure
- d. Will the project have a significant effect on the economic activities of the area?
- e. Will the project have a significant effect on any parks or recreation areas?
- f. Does the proposed activity or project require a Coastal Zone Consistency Determination?

☐☒☐☒☐☒☐☒☐☒☐☒

#### AIR QUALITY AND WATER QUALITY

Yes

No

- a. Will the project have a significant effect on air quality?
- b. Will the project require any dredging and/or disposal of any material (including construction) in any wetlands or waterways? If so, the project may require a Corps of Engineers Section 404 permit.
- c. Will there be any modification of the stream bed or banks of a waterway?

☐☒☐☒☐☒

**PROJECT ENVIRONMENTAL CONSIDERATIONS**

Page 3

**NATURAL RESOURCES**

**Yes**

**No**

- a. Will the project require significant removal of any marine, aquatic, or terrestrial vegetation?
- b. Are there any known rare or endangered Species within range of the project area?
- c. Is the project located inside or near a wildlife refuge or wildlife conservation area?

☐☒☐☒☐☒

**ARCHEOLOGICAL AND HISTORIC RESOURCES**

**Yes**

**No**

Is the project site located in any area of archeological, cultural, or historical value. Consult the State Historical Preservation Officer (SHPO) for determination.

☐☒

**EXPLANATIONS TO THE ABOVE: (USE ADDITIONAL PAGES AS NECESSARY)**

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## PROJECT ENVIRONMENTAL CONSIDERATIONS

Page 4

5. Coordination. Identify who was contacted in the development of the project and in the preparation of this environmental analysis. Appropriate agencies for coordination might include:
- a. The South Carolina Department of Health and Environmental Control (SCDHEC) POC Joseph Benotz
  - b. The South Carolina Wildlife and Marine Resources Division POC. Robert L. Stevenson
  - c. The State Historical Preservation Officer (SHPO) POC. Mike Matthews
  - d. The Regional Environmental Protection Agency (EPA) POC Mark Antony
  - e. The United States Army Corps of Engineers POC George Patton
  - f. The United States Soil Conservation Service POC \_\_\_\_\_
6. References ( if Appropriate).

The information provided in the above document will be analyzed at the Regional Office to determine if there will be significant environmental impacts as a result of the proposed project. If not, then a Finding of No Significant Impact (FONSI) will be prepared, attached to the Environmental Analysis, now an Environmental Assessment (EA), and forwarded to Headquarters Hazard Mitigation Branch for approval. If significant impacts are anticipated, then either the project will be reviewed and revised or an Environmental Impact Statement (EIS) will be prepared.

John Benotz  
Project Hazard Mitigation Coordinationator

1-20-91  
Date

Date 1/20/91		<b>404 WORK SCHEDULE/SUMMARY REPORT</b>						State Project No.	
Applicant City of Carolina		County South County		POC: John B. Doe (803) 222-3333					
Stormwater Pump Station and Drainage Management System.  (List Application Measure: Include Steps/Phases Of the Mitigation Project)		Quarterly Reports      1                      2                      3                      4 Date: _____							
		<b>Status Codes:</b> 1 - On Schedule 2 - Suspended 3 - Delayed 4 - Cancelled 5 - Completed		<b>Cost Codes:</b> 1 - Cost Unchanged 2 - Cost Overest. 3 - Cost Under Est.		<b>State Review:</b> Date: Initial		<b>FEMA Review:</b> Date: Initial	
Project Activity - Mitigation Measure		Quarter 1		Quarter 2		Quarter 3		Quarter 4/Final	
		S	C	S	C	S	C	S	C
1) Conduct preliminary analysis, site survey and prepare scope of work.		5							
2) Arrange for environmental site survey and permits.		5							
3) Solicit engineering and design bids.		5							
4) Solicit project bids and award contracts.				5					
5) Begin work on upgrade and modifications of intake and outlets.						5			
6) Commence construction on pump station complex						5			
7) Commence construction of overflow artery						5			
8) Install Pump station								5	



**404 Project Budget**1. Project Title Stormwater Pump Stations and Drainage Management System2. Project period Begin est mid-1991 End est early Date Submitted 1/20/91  
19933. Project Total Cost \$ 3,594,610Federal Share \$ 1,797,305 Subgrantee/Other Share \$ 1,797,305

4. Budget Summary*	Federal	Subgrantee	Other	Total
1. Stormwater pumps	1,070,102	970,102	100,000	2,104,204
2. Equipment	163,800	163,800		327,600
3. Materials	250,000	250,000		500,000
4. Labor	73,903	73,903		147,806
5. Technical Fee	75,000	75,000		150,000
6. Land Acquisition	87,500	87,500		175,000
7. Contingence Fee 5%	69,500	69,500		139,000
8. Administrative Exp	7,500	7,500		15,000
9.				
10.				
Total	\$1,797,305	\$1,697,305	\$100,000	\$3,594,610

\* Provide explanation by line item on accompanying page to include detailed identification of matching sources.

5. Authorized Federal Administrative Costs: \_\_\_\_\_

6. Forecasted Cash Needs:

1st Quarter	59,910.65	59,910.65		1,198,203.30
2nd Quarter	958,562.65	858,562.65	100,000	1,917,125.30
3rd Quarter	239,640.70	239,640.70		479,281.40
4th Quarter				
Total	\$1,797,305	\$1,697,305	\$100,000	\$3,594,610

State Reviewer \_\_\_\_\_ Approved/Disapproved Date \_\_\_\_\_

## LINE ITEM DESCRIPTION

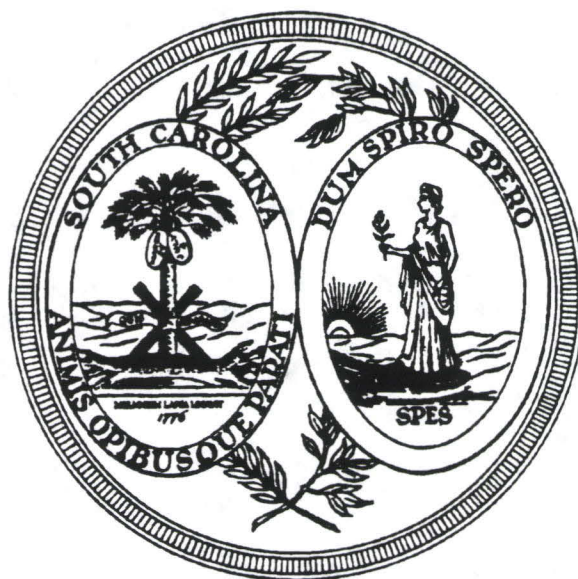
- Item 1. The project requires the purchase and installation of two 57,000 gpm stormwater pumpstations for the Calhoun and Clifton Street areas. The matching cost of the entire project has been met by the subgrantee by the passing of a bond issue, which covers the entire 50% share (less \$100,000 in CDBG funding) required for the whole project.
- Item 2. The project requires the rental of transportation and street digging equipment, (e.g. 2 front in loaders, 3 dump trucks, a flatbed truck, and various other crew trucks). The matching funds are covered by the bond issue.
- Item 3. The project requires the purchase of materials that will allow for the installation of the stormwater pumpstations along with the connection of the new stations to the existing drainage systems. The matching costs for materials has been met by the bond issue.
- Item 4. The installation and connection of the pumpstations requires the efforts of two twenty men construction crews for the placement of the two stormwater pumpstations. The cost of labor has been addressed by the bond issue.
- Item 5. The installation of the two stormwater pumpstations requires the supervision of a construction contractor and engineer to allow for the connection of the new pumpstations to the existing drainage systems. The charge for technical services is covered in match by the bond issue.
- Item 6. The project requires that certain areas of land be purchased for the installation of the pumpstations as well as the relocation of certain existing dwellings. The required match will be met by the bond issue.
- Item 7. The plan for the construction of the two pumpstations require that there be built in flexibility which allows for the possibility of cost overruns during the project period. There has been built in a 5% contingency fee to allow for any overruns. This match is also covered by the bond issue.
- Item 8. The cost for administering this grant is required in order to supervising and monitoring the installation of the pumpstation. The required match is funded by the bond issue.

## MATCH OUTLINE

Primary funding for the applicant match will be provided in a construction bond for \$2,000,000 which was recently approved by the City of Carolina City Council. Additionally, a \$100,000 Community Development Block Grant has been approved for packaging within the applicant's match.



# GRANT APPLICATION PACKAGE



INSTRUCTIONS AND ATTACHMENTS

## HMGP 404 APPLICATION GUIDE

Note: The following instructions are provided to assist applicants' in the preparation of potential projects for 404 funding. Special attention should be directed to Attachment 2, which provides the primary information to be used in determining project eligibility.

### COVER SHEET

#### APPLICANTS' INSTRUCTIONS

- |         |   |
|---------|---|
| Block 1 | Provide name of applicant (Name of Agency, County, Municipality, or Non-Profit Organization)  |
| Block 2 | Provide the name of a Point of Contact, an individual who will be able to answer any questions that might arise about the grant as well as the number where that person can be reached. |
| Block 3 | Provide the title of the grant project.   |
| Block 4 | Provide the total estimated cost of the whole project.  |
| Block 5 | Provide the total requested FEMA funding for the project. (FEMA will fund up to 50% of the total project cost)  |
| Block 6 | Provide the named location of the project. (County in which the project will be located)  |
| Block 7 | Provide a brief description of the project and the scope of work which will be required to implement the project.   |
| Block 8 | List all enclosed supporting documents and references.  |



<b>PROJECT APPLICATION</b> <b>HAZARD MITIGATION PROGRAM 404 GRANT</b>		State Project No.		Date
County		Pertinent Disaster Declaration <input type="checkbox"/> Hugo 1989 (FEMA 843 DR-SC) <input type="checkbox"/> Floods 1990 (FEMA 881-DR-SC)		
1. Applicant (Subgrantee):		2. POC:      Name:  Phone No.		
3. Project Title:		4. Total Cost Estimate:	5. FEMA Funding Requested:	
6. Location of Project:				
7. Brief Description of Measure/Scope of Work:				
8. Attachments  1. Application for Federal Assistance (SF 424) 2. Detailed Project Description 3. Subgrantee Financial Capability Survey 4. Section 404 Project Environmental Considerations 5. 404 Work Schedule/ Summary Report 6. 404 Project Budget 7. Additional supporting documents (Studies, Plans, Drawings, Letters, etc.)				

## INSTRUCTIONS FOR THE SF 424

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

- | Item:   | Entry:  |
|---|---|
| <ol style="list-style-type: none"> <li>1. Self-explanatory.</li> <li>2. Date application submitted to Federal agency (or State if applicable) &amp; applicant's control number (if applicable).</li> <li>3. State use only (if applicable).</li> <li>4. If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank.</li> <li>5. Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application.</li> <li>6. Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service.</li> <li>7. Enter the appropriate letter in the space provided.</li> <li>8. Check appropriate box and enter appropriate letter(s) in the space(s) provided:                         <ul style="list-style-type: none"> <li>— "New" means a new assistance award.</li> <li>— "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date.</li> <li>— "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation.</li> </ul> </li> <li>9. Name of Federal agency from which assistance is being requested with this application.</li> <li>10. Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested.</li> <li>11. Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project.</li> </ol> | <ol style="list-style-type: none"> <li>12. List only the largest political entities affected (e.g., State, counties, cities).</li> <li>13. Self-explanatory.</li> <li>14. List the applicant's Congressional District and any District(s) affected by the program or project.</li> <li>15. Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate <u>only</u> the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15.</li> <li>16. Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process.</li> <li>17. This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes.</li> <li>18. To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)</li> </ol> |



APPLICATION FOR  
FEDERAL ASSISTANCE

<b>1. TYPE OF SUBMISSION:</b> <i>Application</i> <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction <i>Preapplication</i> <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction		<b>2. DATE SUBMITTED</b>	Applicant Identifier
<b>3. DATE RECEIVED BY STATE</b>		State Application Identifier	
<b>4. DATE RECEIVED BY FEDERAL AGENCY</b>		Federal Identifier	

<b>5. APPLICANT INFORMATION</b> Legal Name:		Organizational Unit:	
Address (give city, county, state, and zip code):		Name and telephone number of the person to be contacted on matters involving this application (give area code):	

<b>6. EMPLOYER IDENTIFICATION NUMBER (EIN):</b> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div>	<b>7. TYPE OF APPLICANT: (enter appropriate letter in box)</b> <input type="checkbox"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           A. State            B. County            C. Municipal            D. Township            E. Interstate            F. Intermunicipal            G. Special District         </div> <div style="width: 45%;">           H. Independent School Dist.            I. State Controlled Institution of Higher Learning            J. Private University            K. Indian Tribe            L. Individual            M. Profit Organization            N. Other (Specify): _____         </div> </div>
--	--

<b>8. TYPE OF APPLICATION:</b> <input type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es): <input type="checkbox"/> <input type="checkbox"/> A. Increase Award      B. Decrease Award      C. Increase Duration D. Decrease Duration      Other (specify): _____	<b>9. NAME OF FEDERAL AGENCY:</b>
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<b>10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:</b> <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px 0;"></div> TITLE:	<b>11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:</b> <div style="border: 1px solid black; width: 100%; height: 100px;"></div>
--	--

<b>12. AREAS AFFECTED BY PROJECT (cities, counties, states, etc.):</b> <div style="border: 1px solid black; width: 100%; height: 40px;"></div>	<b>13. PROPOSED PROJECT:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black;">Start Date</td> <td style="width: 50%; border-bottom: 1px solid black;">Ending Date</td> </tr> </table>	Start Date	Ending Date
Start Date	Ending Date		

<b>14. CONGRESSIONAL DISTRICTS OF:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black;">a. Applicant</td> <td style="width: 50%; border-bottom: 1px solid black;">b. Project</td> </tr> </table>	a. Applicant	b. Project	<b>15. ESTIMATED FUNDING:</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">a. Federal</td> <td style="width: 10%;">\$</td> <td style="width: 10%;"></td> <td style="width: 10%;">.00</td> </tr> <tr> <td>b. Applicant</td> <td>\$</td> <td></td> <td>.00</td> </tr> <tr> <td>c. State</td> <td>\$</td> <td></td> <td>.00</td> </tr> <tr> <td>d. Local</td> <td>\$</td> <td></td> <td>.00</td> </tr> <tr> <td>e. Other</td> <td>\$</td> <td></td> <td>.00</td> </tr> <tr> <td>f. Program Income</td> <td>\$</td> <td></td> <td>.00</td> </tr> <tr> <td>g. TOTAL</td> <td>\$</td> <td></td> <td>.00</td> </tr> </table>	a. Federal	\$		.00	b. Applicant	\$		.00	c. State	\$		.00	d. Local	\$		.00	e. Other	\$		.00	f. Program Income	\$		.00	g. TOTAL	\$		.00
a. Applicant	b. Project																														
a. Federal	\$		.00																												
b. Applicant	\$		.00																												
c. State	\$		.00																												
d. Local	\$		.00																												
e. Other	\$		.00																												
f. Program Income	\$		.00																												
g. TOTAL	\$		.00																												

<b>16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?</b> a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____ b. NO. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW	<b>17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?</b> <input type="checkbox"/> Yes      If "Yes," attach an explanation. <input type="checkbox"/> No
--	---

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED		
a. Typed Name of Authorized Representative	b. Title	c. Telephone number
d. Signature of Authorized Representative		e. Date Signed

Previous Editions Not Usable

Standard Form 124 REV. 1-69  
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## ASSURANCES — CONSTRUCTION PROGRAMS

Note: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure nondiscrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§ 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686) which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794) which prohibit discrimination of the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101-6107) which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 93-255), as amended, relating to non-discrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to non-discrimination in the sale, rental or financing of housing; (i) any other non-discrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements on any other non-discrimination Statute(s) which may apply to the application.



11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), the Copeland Act (40 U.S.C. § 276c and 18 U.S.C. § 874), the Contract Work Hours and Safety Standards Act (40 U.S. §§ 327-333) regarding labor standards for federally assisted construction subagreements.
14. Will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b)

Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§ 1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. § 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).

16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§ 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and preservation of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.
19. Will comply with all applicable requirements of all other Federal laws, Executive Orders, regulations and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
APPLICANT ORGANIZATION	DATE SUBMITTED

## ATTACHMENT 2

### APPLICANTS' INSTRUCTIONS

1. Provide the complete title of the grant project.
2. Provide the name of the Point of Contact for the project.
3. Check appropriate disaster declaration box.
4. Check appropriate project classification box
5. Provide an indepth, clear, and concise description of the problem which is being addressed by this particular grant project. (Use the model detailed project description as a point of reference)
- 5a. The expected response should be **YES**. Then provide a description of the problem that was identified in 5 on the basis of its repetitiveness. The response should include all primary and secondary effects of the problem such as the impact on individuals and public facilities, business or economic impact, and emergency services. In answering this question the applicant must rely upon the records of past occurrences of the problem and document dates, degrees (flood levels, wind speed, etc.), summary of damages, and costs in losses. Sources of information can include state climatological data, Chamber of Commerce local records, Individual Assistance, and Public Assistance grants. A table graph works best here. (See model Attachment 2 as a reference point)



## DETAILED 404 PROJECT DESCRIPTION

(Use continuation sheets as necessary)

1. Project Title \_\_\_\_\_
2. Prepared by: \_\_\_\_\_ Phone: \_\_\_\_\_
3. Disaster Declaration occurred as a result of:  
☐ Hurricane Hugo: September, 1989 ☐ Flooding: October, 1990
4. Classification of Project:(Check Appropriate Box)  

Structural hazard control or construction activity to reduce hazard damage	<input type="checkbox"/>
Retrofitting of facilities	<input type="checkbox"/>
Acquisition or relocation	<input type="checkbox"/>
Development of a comprehensive hazard mitigation program with state and local hazard mitigation standards and with implementation as an essential component	<input type="checkbox"/>
Development or improvement of warning systems	<input type="checkbox"/>
5. Provide a detailed description of the problem to be addressed by this project.
  - a. Is the problem repetitive? Yes/No. (Provide a historical overview of past occurrences, related damages, and financial estimates of losses incurred.)

- 5b. The expected response should be YES. The Hazard which is being addressed in question 5 should be detailed by showing how the hazard poses a threat to public health, or safety if not solved. The more serious the threat that the problem presents to public health/safety then the need for the project becomes greater. Environmental, Health, and Safety Studies should be referenced here, if available.
- 5c. Provide the number of the total population which is directly affected by the problem which is being addressed. In many instances, the seasonal tourist population should be included in the answer for this question.
6. This question is one of the most important and key factors to the successful funding of a grant project. Documentation should support that the project will solve the problem independently and or constitute a functional part of the solution to the problem that is being addressed. The key is how and to what degree the project will solve the problem.
- 6a. In this question the positive impact that the project will have upon the area as a whole should be emphasized. What does the project do for the area.
- 6b. In this question the best possible answer is the response which depicts the worst possible scenario; that being the continued and uncontrolled damages sustained in the impacted areas because the project was not funded. Emphasize the continuing financial losses suffered each time the problem occurs if it is not properly handled or addressed. Stress the negative impact at its most devastating level.



b. Does the problem present a significant risk to public health and/or safety if not solved ? Yes/No. How?

c. What is the scope of the population affected?

6. Does the project solve the problem independently and/or constitute a functional portion of a solution to the problem? Yes/No. How?

a. What impact will the project have on the declared area?

b. What is the impact if the project is not funded? (Include analysis of continuing losses, and imminent threats to public health, and safety and/or property as appropriate.)

7. The expected answer should be **YES**. develop a list of alternatives and briefly discuss the various options which were considered and why this was the optimal project. The shortcomings of the other project alternatives should be discussed to support the choice that you have made.
8. The expected answer should be **YES**. The question expands on the information provided in question 6a and asks how the project contributes to a long term solution to the problem. The key to this question is to demonstrate that its effects will be enduring ones and not just short term. Long term can be defined in terms of the foreseeable future based upon the best information at hand.
- 8a. The expected answer should be **YES**. In this question, any projected change (population growth, relocation of property, changes in natural structures, etc) should be addressed to support the answer in question 8.
- 8b. The expected answer should be **YES**. In this question a description of future activities in support of any required maintenance/modifications of the project, should be discussed
- 8c. This question asks for an estimate of costs associated with long term project maintenance/implementation. The answer is to be used in the determination of cost effectiveness in question 9 and also to provide assurances that the project itself will not result in more expenses than is economically feasible.



7. Has the project been determined to be the most practical, effective and environmentally sound alternative after consideration of a range of options? Yes/No. What were the other options considered, and why is this measure the most appropriate solution?
  
  
  
  
  
  
  
  
  
  
8. Does the project contribute to the long term solution of the problem it intends to address? Yes/No. How?
  - a. Does the project consider future changes in the area impacted? Yes/No. How?
  
  
  
  
  
  
  
  - b. Does the project have manageable future maintenance and/or modification requirements? Yes/No (Explain)
  
  
  
  
  
  
  
  - c. What are the projected costs for future maintenance of the project?

9. The expected answer is YES. This is another important question, where cost effectiveness of the project is established and documented. In questions 5a, 6b, and 8c, a summary of historical and projected losses and long term costs is established. The long term implementation/maintenance costs should be combined with the requested project costs and compared to the historical and projected losses in determining overall cost effectiveness. The information should be presented in a manner which supports the cost savings of the project if implemented. In many instances, cost effectiveness will occur over several years based on the annual occurrences and scope of damages and losses. This is an appropriate method of determining cost effectiveness. A table graph works best for this question in presenting the cost figures.
10. The expected answer should be NO. The 404 program was designed to address the mitigation needs not specifically covered under other Federal programs. If other Federal programs, either funded or unfunded, exist, then 404 funding may be jeopardized.
- 10a. This question addresses potential packaging of the project with other programs to provide a comprehensive solution to a problem which encompasses several different concerns. As cited in the Federal Register, packaging of 404 projects with Federal as well as state and local programs such as Community Development Block Grants programs, is encouraged in order to make the best use of available 404 funding.
11. This question addresses the overall mitigation strategies to be observed by the applicant. The response should take a look at the applicant's "Big Picture", referencing appropriate mitigation, development, and master plans, by describing mitigation goals and outlining the project's relationship to them. The key is to describe how the project enhances a mitigation strategy based upon its relationship with various other programs and activities at the applicants' level.
- 11a. In this question the applicant should specify the interrelationship between the project and other Federal/State programs and objectives. The State mitigation program should always be referenced, along with other mitigation, environmental, health, and safety programs and activities at the state and federal level.
12. This question is very important because it provides the basis for evaluation of the merits of the project itself. It contains these critical elements: project description; objectives; and implementation measures.

- **Project Description:** A detailed project description must be provide, outlining specifically who, what, when, where, why, and how the project is to be accomplished. As much supporting information (i.e. plans, scope of work, photographs, drawings, etc) as possible should be included to document the project parameters.
- **Objectives:** A concise listing of project objectives must be provided to include supporting information for each objective. The objectives should be discussed in terms of the value and contribution to a mitigation strategy.
- **Implementation Measures:** An outline of the implementation measures must be provided documenting how the project will be accomplished. Each implementation measure should be discussed in terms of measurable criteria in order to add credibility to the project.



9. What is the cost of the project? \_\_\_\_\_  
Is the project cost effective? Yes/No. How? i.e. Will the project cost less than the payoff in damages related to the recurring problem? Detailed cost and benefit analysis should be computed on a net present value basis in relation to information provided in questions 5a, 6b, and 8c.
10. Are there any other primary Federal funding sources which would duplicate potential funding of this project? Yes/No. If yes, cite the cognizant agencies, the funding program, and why this funding is not being used.
- a. Will this project be packaged with other Federal, State or Local Program funding sources to achieve a comprehensive solution to the problem?  
Yes/No - If yes, cite the program, agency and amount of funding.
11. What are the mitigation strategies to be observed in the implementation of this project.
- a. Does the project complement other Federal/State programs or objectives
12. Provide a mitigation project description, complete with objectives and implementation measures:

## ATTACHMENT 3

### APPLICANTS' INSTRUCTIONS

This section of the grant application should be prepared by the financial Officer of the Agency, County, Municipality, or Non-Profit Organization.

1. Provide the name, address and phone number of the entity that is applying for the grant.
2. Provide a list of the names, titles and phone number of the CEO and Chief Financial Officer of the entity.
3. Provide a description of what type entity is applying.

#### Section II

1. Provide the type of Accounting Method used
2. Provide the type of Recording Method used.
3. Describe the Books of Account used by the applicant.
- 4-9. Answer the questions with the appropriate response and provide copies of appropriate documents with the application.

#### Section III

1. Name the person who is in charge of the financial information.
- 2-4. Answer the questions with the appropriate response and provide copies of appropriate documents with the application..
5. Provide a listing of personnel authorized to sign checks for the applicant.



ATTACHMENT 3

**SUBGRANTEE  
FINANCIAL CAPABILITY SURVEY**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

Phone: \_\_\_\_\_

1. Subgrantee Name, Address, and Telephone Number:

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2. Name, Title and Telephone Number of Chief Executive Officer and Chief Financial Officer:

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3. Type of Entity:

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**SECTION II ACCOUNTING SYSTEM**

1. The accounting method used for recording and reporting financial information is:

Cash \_\_\_\_\_ Accrual \_\_\_\_\_ Modified Accrual \_\_\_\_\_

**FINANCIAL CAPABILITY SURVEY**

page 2

2. The accounting method used for recording and reporting financial information is:  
Manual \_\_\_\_\_ Automated \_\_\_\_\_
3. Briefly describe the Books of Account used by the applicant:
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
4. Does the applicant's accounting system provide for the accumulation and recording of revenue by grants?  
Yes ☐ No ☐
5. Does the applicant's accounting system provide for accounting and recording expenditures by grants and cost categories?  
Yes ☐ No ☐
6. Does the applicant use an operating budget to control funds by activity?  
Yes ☐ No ☐
7. Does the applicant prepare an internal monthly financial report?  
Yes ☐ No ☐
8. Does the applicant have an approved Indirect Cost Rate?\_\_\_\_\_ If yes, attach a copy. If no does the applicant have an approved cost allocation plan? \_\_\_\_\_ If yes, attach a copy.
9. Does the applicant have written accounting procedures?  
Yes ☐ No ☐ (if yes, attach a copy)



**SECTION III GENERAL INFORMATION**

1. To whom does the Chief Financial Officer report? \_\_\_\_\_  
(attach organizational chart)
2. Does the applicant have written Personnel Policies and Procedures?  
Yes ☐ No ☐ (If yes, attach a copy)
3. Does the applicant have Fidelity Bond Coverage for responsible officials?  
Yes ☐ No ☐ (If yes, attach a copy)
4. Does the applicant have an agency-wide audit conducted annually?  
Yes ☐ No ☐ (If yes, please attach a copy of most recent audit. If no,  
please attach a copy of each funding sources most recent audit,( i. e. H/S,  
USDA, COA, etc.)
5. List positions authorized to sign checks for the applicant:  
  
\_\_\_\_\_  
  
\_\_\_\_\_  
  
\_\_\_\_\_  
  
\_\_\_\_\_  
  
\_\_\_\_\_

## ATTACHMENT 4

### APPLICANTS' INSTRUCTIONS

Section A. If the proposed project satisfies the exclusionary rule and presents no impact on the environment, a short statement summarizing this fact and the reasons why should be provided in the space below this section along with a signature and date entered on page 4.

Section B. All other projects will present some impact on the environment; therefore, section B must be completed to allow FEMA to make a determination of what impact the project will have on the environment.

1. Provide a summary of the information outlined in question 5 of Attachment 2.
2. Provide a summary of the information outlined in question 12 of Attachment 2.
3. Provide a summary of the information outlined in question 7 of Attachment 2.
4. Answer each question "Yes" or "No". For "Yes" responses, provide background information in the space provided. Use additional pages as necessary.
5. Identify appropriate agencies and points of contact used in the resolution of any environmental issues during the formulation of the grant proposal.
6. Cite any references governing the environmental analysis.
7. Sign and date the attachment.



**SECTION 404**  
**PROJECT ENVIRONMENTAL CONSIDERATIONS**

Projects funded under Section 404 must comply with certain environmental requirements. The first step is to determine if the individual project is categorically excluded from the need to prepare an Environmental document. The types of projects that do not need the environmental analysis are those which will not result in any physical change to the environment. Such projects include:

- \* Training activities,
  - \* Public education programs,
  - \* Studies that involve no commitment of resources other than manpower and funding, and
  - \* Technical assistance activities.
- A. If it is determined that a project meets the categorical exclusion criteria, provide a brief explanation, describing the project and why there will be no impact to the environment.
- B. All other projects should include an environmental analysis to aid in the compliance with environmental requirements. This analysis should contain:
1. Need for the proposed action: What is the problem/issue that is being addressed?
  2. Description of the proposed action, including location (if applicable), all actions associated with implementing the mitigation project, and timing of project implementation.

## PROJECT ENVIRONMENTAL CONSIDERATIONS

Page 2

3. Alternatives considered, including the no action alternative.
4. An analysis of the environmental effects of the proposed project. The following questions need to be answered with a Yes (with explanation), No or Not Applicable to address this item.

### LAND USE AND SOCIOECONOMIC ISSUES

Yes

No

- a. Is the proposed project inconsistent with the land use in the area?
- b. Does the project conflict with local zoning ordinances
- c. Will the project result in the relocation of any structure
- d. Will the project have a significant effect on the economic activities of the area?
- e. Will the project have a significant effect on any parks or recreation areas?
- f. Does the proposed activity or project require a Coastal Zone Consistency Determination?

☐☐☐☐☐☐☐☐☐☐☐☐

### AIR QUALITY AND WATER QUALITY

Yes

No

- a. Will the project have a significant effect on air quality?
- b. Will the project require any dredging and/or disposal of any material (including construction) in any wetlands or waterways? If so, the project may require a Corps of Engineers Section 404 permit.
- c. Will there be any modification of the stream bed or banks of a waterway?

☐☐☐☐☐☐



**PROJECT ENVIRONMENTAL CONSIDERATIONS**

Page 3

**NATURAL RESOURCES**

**Yes**

**No**

- a. Will the project require significant removal of any marine, aquatic, or terrestrial vegetation? ☐ ☐
- b. Are there any known rare or endangered Species within range of the project area? ☐ ☐
- c. Is the project located inside or near a wildlife refuge or wildlife conservation area? ☐ ☐

**ARCHEOLOGICAL AND HISTORIC RESOURCES**

**Yes**

**No**

Is the project site located in any area of archeological, cultural, or historical value. Consult the State Historical Preservation Officer (SHPO) for determination.

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**EXPLANATIONS TO THE ABOVE: (USE ADDITIONAL PAGES AS NECESSARY)**

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## PROJECT ENVIRONMENTAL CONSIDERATIONS

Page 4

5. Coordination. Identify who was contacted in the development of the project and in the preparation of this environmental analysis. Appropriate agencies for coordination might include:
- a. The South Carolina Department of Health and Environmental Control (SCDHEC) POC \_\_\_\_\_
  - b. The South Carolina Wildlife and Marine Resources Division POC \_\_\_\_\_
  - c. The State Historical Preservation Officer (SHPO) POC \_\_\_\_\_
  - d. The Regional Environmental Protection Agency (EPA) POC \_\_\_\_\_
  - e. The United States Army Corps of Engineers POC \_\_\_\_\_
  - f. The United States Soil Conservation Service POC \_\_\_\_\_
6. References ( if Appropriate).

The information provided in the above document will be analyzed at the Regional Office to determine if there will be significant environmental impacts as a result of the proposed project. If not, then a Finding of No Significant Impact (FONSI) will be prepared, attached to the Environmental Analysis, now an Environmental Assessment (EA), and forwarded to Headquarters Hazard Mitigation Branch for approval. If significant impacts are anticipated, then either the project will be reviewed and revised or an Environmental Impact Statement (EIS) will be prepared.

\_\_\_\_\_  
Project Hazard Mitigation Coordinator

\_\_\_\_\_  
Date



## ATTACHMENT 5

### APPLICANTS' INSTRUCTIONS

Note: The primary purpose of this attachment is to provide a tracking mechanism for the projects once funding has been approved.

- Block 1 Provide name of applicant (Name of entity that is applying for the grant)
- Block 2 Provide the name of the county in which the applicant is located.
- Block 3 Provide the name and phone number of the Point of Contact for the grant.
- Block 4 List the project title and all the implementation steps or phases of the grant project, with projected time of completion for each step or phase. Do not fill in Quarterly Reports Date or the "C" status box. Enter only a "S" in the appropriate "S" box to indicate projected completion of the respective task. (See the example provided in the model application).





## **ATTACHMENT 6**

### **APPLICANTS' INSTRUCTIONS**

1. Provide the project title.
2. Provide the estimated beginning date and the projected ending date as well as the date on which the grant application was submitted.
3. Provide the total cost of the project, including the total federal and local shares.
4. Provide a listing in a line item fashion of all the necessary costs which will be incurred in the project. (Use the model project application package as a guide in recording the budget.)
5. Leave Blank. The State will provide the Federally allowed Administrative Cost for the grant project.
6. Provide a list of the forecasted cash needs for the grant, by quarters of the project year.
7. On the additional page, list by line item a description and justification of the specific costs. Include information on applican match to cover source, type, etc. as appropriate.

**404 Project Budget**

1. Project Title \_\_\_\_\_

2. Project period Begin \_\_\_\_\_ End \_\_\_\_\_ Date Submitted \_\_\_\_\_

3. Project Total Cost \_\_\_\_\_

Federal Share \_\_\_\_\_ Subgrantee/Other Share \_\_\_\_\_

**4. Budget Summary\***

	Federal	Subgrantee	Other	Total
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Total				

\* Provide explanation by line item on accompanying page to include detailed identification of matching sources.

5. Authorized Federal Administrative Costs: \_\_\_\_\_

6. Forecasted Cash Needs:

1st Quarter				
2nd Quarter				
3rd Quarter				
4th Quarter				
Total				



## IX. POINTS OF CONTACT

State Hazard Mitigation Officer (SHMO).....734-0428  
Office of the Governor  
Division of Public Safety Programs

Governor's Authorized Representative (GAR).....734-8889  
Public Assistance (Hugo)  
Office of the Governor

Governor's Authorized Representative (GAR).....734-1174  
Public Assistance (Flood)  
Office of the Governor

State Emergency Preparedness Division.....734-8020

Coastal Hazard Advisory and Mitigation Project.....656-0488  
Clemson University  
(Technical Assistance)

Grant Applications should be mailed to:

The State Hazard Mitigation Officer  
Division of Public Safety Programs  
Office of the Governor  
1205 Pendleton St.  
Columbia, S.C. 29201

SOUTH CAROLINA STATE LIBRARY



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